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PATENT ABSTRACTS OF JAPAN

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(54) DATA PROCESSOR AND DATA PROCESSING METHOD

(57)Abstract:

PROBLEM TO BE SOLVED: To provide various detailed information on vending merchandise to a customer by additionally storing series of merchandise messages related to the vending merchandise as one part of merchandise information as well and displaying them together at the time of registration processing.

SOLUTION: In a POS terminal 21, displays 29 and 30 for customer and clerk, a PLU memory 31 and a main memory 32 or the like are connected to a system bus 26 connected to a main control part 22. The PLU memory 31 stores a lot of merchandise information for every vending merchandise and further, merchandise messages are additionally stored in the merchandise information. The merchandise message is test data such as notices on the use and maintenance of vending merchandise, for example. when the main control part 22 performs access to this PLU memory 31, the merchandise information is read out, temporarily stored in the main memory 32 and registered with an inputted merchandise code as a retrieval key. Then, various kinds of information related to the registration processing are displayed on the displays 29 and 30. In this case, the merchandise message is also displayed as one part of merchandise information.
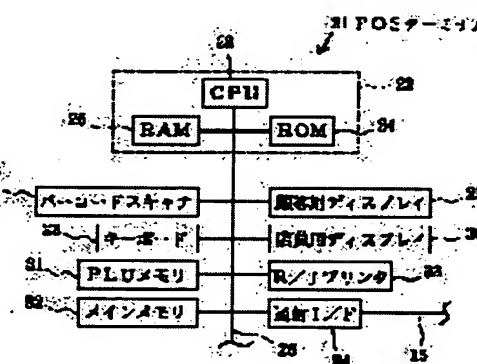
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CLAIMS

[Claim(s)]
[Claim 1] An information-storage means by which the goods information which possesses a bar code and the selling price respectively at least is stored in advance for a majority of every selling goods. An information input means to receive the alter operation of a bar code. The information read-out means which reads goods information from the aforementioned information-storage means by using as a search key the bar code by which alter operation was carried out, a goods registration means to perform registration processing based on the read goods information, and the information-display means which carries out the display output of the various information relevant to the registration processing performed. It is the data processor equipped with the above, and a series of goods messages relevant to selling goods are set up as a part of goods information stored in the aforementioned information-storage means, and it is characterized by carrying out the display output also of the goods message of goods information at the time of execution of registration processing of the aforementioned information-display means.

[Claim 2] An information-storage means by which the goods information which possesses a bar code and the selling price respectively at least is stored in advance for a majority of every selling goods. An information input means to receive the alter operation of a bar code. The information read-out means which reads goods information from the aforementioned information-storage means by using as a search key the bar code by which alter operation was carried out, a goods registration means to perform registration processing based on the read goods information, and an information printing means to carry out the printout of the various information relevant to the performed registration processing, and to publish a receipt. It is the data processor equipped with the above, and a series of goods messages relevant to selling goods are set up as a part of goods information stored in the aforementioned information-storage means, and it is characterized by carrying out the printout also of the goods message of the goods information by which registration processing of the aforementioned information printing means was carried out to a receipt.

[Claim 3] It is the data processor according to claim 1 or 2 which the message flag which shows the existence of a goods message as a part of goods information stored in advance is set as the aforementioned information-storage means, and is characterized by the aforementioned information read-out means performing read-out processing of a goods message corresponding to a message flag.

[Claim 4] The aforementioned information-storage means possesses the goods information-storage section and the goods message storage section. the aforementioned goods information-storage section The goods information to which the identification information of a goods message was given is stored in a bar code and the selling price in advance at least. the aforementioned goods message storage section The goods message is stored in advanc with identification information. an information read-out means The claim 1 characterized by reading a goods message from the aforementioned goods message storage section by using identification information of the read goods information as a search key while reading goods information from the aforementioned goods information-storage section by using a bar code as a search key, r

the data processor of any 1 publication of 3.

[Claim 5] An information-display means is a data processor according to claim 1 characterized by providing the display for customers, and the display for salesclerks separat ly, and carrying out the display output of the goods message of goods information to the display for customers.

[Claim 6] An information-display means is a data processor according to claim 1 characterized by providing the display for customers, and the display for salesclerks separately, and carrying out the display output of the goods message of goods information to the display for salesclerks.

[Claim 7] An information-storage means by which the goods information which possesses a bar code and the selling price respectively at least is stored in advance for a majority of every selling goods. An information input means to receive the alter operation of a bar code. The information read-out means which reads goods information from the aforementioned information-storage means by using as a search key the bar code by which alter operation was carried out, a goods registration means to perform registration processing based on the read goods information, and the information-display means which carries out the display output of the various information relevant to the registration processing performed. It is the data-processing method equipped with the above, and a series of goods messages relevant to selling goods are set up as a part of goods information stored in the aforementioned information-storage means, and it is characterized by carrying out the display output also of the goods message of goods information to the aforementioned information-display means at the time of execution of registration processing.

[Claim 8] An information-storage means by which the goods information which possesses a bar code and the selling price respectively at least is stored in advance for a majority of every selling goods. An information input means to receive the alter operation of a bar code. The information read-out means which reads goods information from the aforementioned information-storage means by using as a search key the bar code by which alter operation was carried out, a goods registration means to perform registration processing based on the read goods information, and an information printing means to carry out the printout of the various information relevant to the performed registration processing, and to publish a receipt. It is the data-processing method equipped with the above, and a series of goods messages relevant to selling goods are set up as a part of goods information stored in the aforementioned information-storage means, and it is characterized by making it make a receipt carry out the printout also of the goods message of the goods information by which registration processing was carried out to the aforementioned information printing means.

[Translation done.]

DETAILED DESCRIPTION

[Detailed Description of the Invention]
[0001]
[The technical field to which invention belongs] this invention relates to the data processor and method of carrying out registration processing of the selling goods.
[0002]
[Description of the Prior Art] Conventionally, data processors, such as an electronic cash register and a POS (PointOf Sales) terminal, are used for registration processing of selling goods. The 1 conventional example of such a data processor is explained below with reference to drawing 6 or drawing 8 . In addition, the block diagram showing the physical structure of a POS terminal where drawing 6 is a data processor, the ** type view showing the content of storage of the PLU memory by which drawing 7 is equivalent to an information-storage means, and drawing 8 are flow charts which show the data-processing method of a POS terminal.
[0003] First, POS terminal 1 illustrated as a data processor here possesses the main control section 2 which consists of a microcomputer, as shown in drawing 6 . This main control section 2 possesses CPU (Central ProcessingUnit)3 as a subject of a computer, and ROM (ReadOnly Memory)4 and RAM (Random Access Memory)5 are connected to this CPU3 as an information-storage medium.
[0004] The storage area where ROM4 is carrying out fixed storage of the software, such as a control program of CPU3, in advance, and RAM5 stores the processed data of CPU3 etc. temporarily is secured, and performs various kinds of data processing corresponding to a control program, input data, etc. with proper CPU3.
[0005] The system bus 6 is connected to the main control section 2, and a bar code scanner 7, a keyboard 8, the displays 9 and 10 the object for customers and for salesclerks, the PLU (Price Look Up) memory 11, main memory 12, the R/J (Receipt/Journal) printer 13, communication I/F (Interface)14, etc. are connected to this system bus 6.
[0006] A bar code scanner 7 consists of a laser light source, a photo detector, a decoder, etc., carries out the reading scan of the bar code given to selling goods with the label etc., and inputs a bar code. The keyboard 8 possesses the ten key, the PLU key, etc., and various information, such as a bar code, is inputted by manual operation.
[0007] The displays 9 and 10 the object for customers and for salesclerks consist of LCD (Li1uid Crystal Display) and CRT (Cathode-Ray Tube) which carry out the display output of the various information by the dot matrix, and display respectively various information relevant to registration processing, such as a goods name and the selling price, on a customer and a salesclerk.
[0008] The PLU memory 11 consists of a storage area of mass information-storage media, such as HDD (Hard Disc Drive), and as shown in drawing 7 , the goods information which consists of a bar code, a goods name, and th selling price here is stored in advance for a majority of every selling goods. Main memory 12 also consists of a storage area of a mass information-storage medium, and accumulates the various information relevant to registration proc ssing.
[0009] The R/J printer 13 consists of a thermal printer which uses the continuation sheet of 2 run as a print sh et, carries out the printout of the various information relevant to the perform d

registration processing, such as a goods name and the selling price, to the continuation sh et of 2 run, and publishes the receipt for customers, and the journal for stores.

[0010] The communication networks 15, such as LAN (Local Area Network), are connected to communication I/F14, and a majority of other POS terminals and host computers (not shown [both]) which are piece at least are connected to this communication network 15. Communication I/F14 receives various information, such as the newest goods information stored in the PLU memory 11, from a host computer while transmitting various information, such as processing information accumulated at main memory 12, to a host computer.

[0011] POS terminal 1 of the above structures can perform registration processing of selling goods. More, if the selling goods with which a customer expects purchase of a detail are gathered in the position of POS terminal 1 where a salesclerk stands by, a salesclerk will make a bar code scanner 7 carry out the reading scan of the bar code of the label given to selling goods, or will input the bar code of a label manually on a keyboard 8, and will do alter operation of the bar code to POS terminal 1.

[0012] If a bar code is inputted as POS terminal 1 is shown in drawing 8 (Step S1), the main control section 2 will read goods information for this from the PLU memory 11 as a search key (Step S2). Thus, the display output of the goods name and the selling price of goods information which were read is carried out to the displays 9 and 10 the object for customers, and for salesclerks by the main control section 2 (Step S3), various information, such as a bar code, is accumulated at main memory 12, and registration processing of selling goods is performed (Step S4).

[0013] A charge and change will be delivered and received by the customer and the salesclerk, and if the above registration processings are performed for every selling goods of all of which a customer expects purchase (Step S5) and registration processing is completed with all selling goods, settlement-of-accounts processing will be performed (Step S6). Thus, if settlement-of-accounts processing is completed, the various information relevant to the performed registration processing will be read from main memory 12 by the main control section 2, even the R/J printer 13 will be transmitted, a printout will be carried out to the continuation sheet whose various information is 2 runs by this R/J printer 13, and the receipt for customers and the journal for stores will be published (Step S7).

[0014]

[Problem(s) to be Solved by the Invention] At above POS terminals 1, if the bar code of selling goods is inputted by the bar code scanner 7 or the keyboard 8, goods information is read from the PLU memory 11, registration processing is carried out, the various information which expressed the various information which carries out registration processing as displays 9 and 10, or carried out registration processing will be printed by the R/J printer 13, and registration processing of selling goods will be performed.

[0015] However, in above POS terminals 1, the various information by which a display output is carried out on displays 9 and 10, or a printout is carried out by the R/J printer 13 is goods names, the selling prices, etc. of selling goods, and cannot provide a customer with the various and detailed information relevant to selling goods.

[0016] this invention is made in view of the above technical problems, and it aims at offering the data processor and method of providing a customer with the various and detailed information relevant to selling goods.

[0017]

[Means for Solving the Problem] An information-storage means by which the goods information to which the data processor of 1 of this invention possesses a bar code and the selling price respectively at least is stored in advance for a majority of every selling goods, An information input means to receive the alter operation of a bar code, and the information read-out means which reads goods information from the afor mentioned information-storage means by using as a search key the bar code by which alter operation was carried out, In the data processor possessing a goods registration means to perform registration processing based on th read goods information, and the information-display means which carries out the display output of the various information relevant to the registration processing performed A series of goods

messages relevant to selling goods are s t up as a part of goods information stored in the aforementioned information-storage means, and the aforemention d information-display means carries out the display output also of the goods message of goods information at the time of execution of registration processing.

[0018] Therefore, if the alter operation of a bar code is received by the information input means when carrying out registration processing of the selling goods, goods information will be read from an information-storage means by the information read-out means by using as a search key this bar code by which alter operation was carried out. Thus, while registration processing is performed by the goods registration means based on the read goods information, the display output of the various information relevant to this registration processing performed is carried out by the information-display means.

[0019] Since the display output also of a series of goods messages stored in the information-storage means in advance as a part of goods information is carried out when the display output of the various information relevant to registration processing is carried out by the information-display means as mentioned above, a customer is provided with the various and detailed information relevant to selling goods.

[0020] In addition, the data processor as used in the field of this invention is equipment used for registration processing of selling goods, and the POS terminal connected to the host computer, the electronic cash register of a stand-alone, etc. are permitted. A series of various and detailed messages with useful providing for a customer in relation to a goods message at the selling goods are meant, for example, use of selling goods, guidance of notes of maintenance, etc. are permitted.

[0021] Moreover, the storage area of information-storage media, such as HDD and RAM, etc. is permitted that the information-storage means as used in the field of this invention should just be what can memorize the goods information on much selling goods. Other various meanses permit the hardware of exclusive use, the computer by which the proper function was given by the program, the functions realized inside the computer by the proper program, such combination, and ** that what is necessary is to just be formed so that the function may be realized.

[0022] An information-storage means by which the goods information to which other data processors of this invention possess a bar code and the selling price respectively at least is stored in advance for a majority of every selling goods, An information input means to receive the alter operation of a bar code, and the information read-out means which reads goods information from the aforementioned information-storage means by using as a search key the bar code by which alter operation was carried out, In the data processor possessing a goods registration means to perform registration processing based on the read goods information, and an information printing means to carry out the printout of the various information relevant to the performed registration processing, and to publish a receipt A series of goods messages relevant to selling goods are set up as a part of goods information stored in the aforementioned information-storage means, and the printout also of the goods message of the goods information by which registration processing of the aforementioned information printing means was carried out is carried out to a receipt.

[0023] Therefore, if the alter operation of a bar code is received by the information input means when carrying out registration processing of the selling goods, goods information will be read from an information-storage means by the information read-out means by using as a search key this bar code by which alter operation was carried out. Thus, based on the read goods information, registration processing is performed by the goods registration means, and the printout of the various information relevant to this performed registration processing is carried out to a receipt by the information printing means.

[0024] Since the printout also of a series of goods messages stored in the information-storage means in advance as a part of goods information is carried out wh n the printout of the various information relevant to registration processing is carried out to a receipt as mentioned above, a customer is provided with the various and detailed information relevant to selling goods.

[0025] As other invention in the above data processors, the m ssage flag which shows the existence of a goods message as a part of goods information stored in advance is set as the

aforementioned information-storage means, and the aforemention d information read-out m ans performs read-out processing of a goods message corresponding to a message flag. Th refore, since read-out processing of a goods message is performed corr sponding to a message flag when an information read-out means reads goods information from an information-storage means, read-out processing to the goods message which is not registered is not performed.

[0026] As other invention in the above data processors The aforementioned information-storage means possesses the goods information-storage section and the goods message storage section. the aforementioned goods information-storage section The goods information to which the identification information of a goods message was given is stored in a bar code and the selling price in advance at least. the aforementioned goods message storage section The goods message is stored in advance with identification information. an information read-out means While reading goods information from the aforementioned goods information-storage section by using a bar code as a search key, a goods message is read from the aforementioned goods message storage section by using identification information of the read goods information as a search key.

[0027] Therefore, when an information read-out means reads goods information from an information-storage means by using a bar code as a search key, goods information is first read from the goods information-storage section, and a goods message is read from the goods message storage section by using the identification information as a search key.

[0028] As other invention in the above data processors, the information-display means possesses the display for customers, and the display for salesclerks separately, and carries out the display output of the goods message of goods information to the display for customers. Therefore, a customer is directly provided with the various and detailed information relevant to selling goods by the display output of the goods message by the display for customers.

[0029] As other invention in the above data processors, the information-display means possesses the display for customers, and the display for salesclerks separately, and carries out the display output of the goods message of goods information to the display for salesclerks. Therefore, since the display output of the goods message is carried out to a salesclerk by the display for salesclerks, a visitor is orally provided with the various and detailed information relevant to selling goods by this salesclerk, for example.

[0030] An information-storage means by which the goods information to which the data-processing method of 1 of this invention possesses a bar code and the selling price respectively at least is stored in advance for a majority of every selling goods, An information input means to receive the alter operation of a bar code, and the information read-out means which reads goods information from the aforementioned information-storage means by using as a search key the bar code by which alter operation was carried out, In the data-processing method of the data processor possessing a goods registration means to perform registration processing based on the read goods information, and the information-display means which carries out the display output of the various information relevant to the registration processing performed A series of goods messages relevant to selling goods are set up as a part of goods information stored in the aforementioned information-storage means, and it was made to carry out the display output also of the goods message of goods information to the aforementioned information-display means at the time of execution of registration processing.

[0031] Therefore, if the alter operation of a bar code is received by the information input means when carrying out registration processing of the selling goods, goods information will be read from an information-storage means by the information read-out means by using as a search key this bar code by which alter operation was carried out. Thus, while registration processing is performed by the goods registration means based on the read goods information, the display output of the various information relevant to this registration processing performed is carried out by the information-display means.

[0032] Since the display output also of a series of goods messages stored in the information-storage means in advance as a part of goods information is carried out when th display output of the various information relevant to registration processing is carri d out by the information-display means as mentioned abov , a customer is provided with the various and detailed

information relevant to selling goods.

[0033] An information-storage means by which the goods information to which oth r data-processing methods of this invention possess a bar code and the selling price respectively at least is stored in advance for a majority of every selling goods, An information input means to receive the alter operation of a bar code, and the information read-out means which reads goods information from the aforementioned information-storage means by using as a search key the bar code by which alter operation was carried out, In the data-processing method of the data processor possessing a goods registration means to perform registration processing based on the read goods information, and an information printing means to carry out the printout of the various information relevant to the performed registration processing, and to publish a receipt A series of goods messages relevant to selling goods are set up as a part of goods information stored in the aforementioned information-storage means, and it was made to make a receipt carry out the printout also of the goods message of the goods information by which registration processing was carried out to the aforementioned information printing means.

[0034] Therefore, if the alter operation of a bar code is received by the information input means when carrying out registration processing of the selling goods, goods information will be read from an information-storage means by the information read-out means by using as a search key this bar code by which alter operation was carried out. Thus, based on the read goods information, registration processing is performed by the goods registration means, and the printout of the various information relevant to this performed registration processing is carried out to a receipt by the information printing means.

[0035] Since the printout also of a series of goods messages stored in the information-storage means in advance as a part of goods information is carried out when the printout of the various information relevant to registration processing is carried out to a receipt as mentioned above, a customer is provided with the various and detailed information relevant to selling goods.

[0036]

[Embodiments of the Invention] One form of operation of this invention is explained below with reference to drawing 1 or drawing 4 . In addition, detailed explanation is omitted using a name with the same, same portion as the 1 conventional example mentioned above about the form of this operation.

[0037] The ** type view showing the logical configuration of the POS terminal whose drawing 1 is the data processor of the form of this operation, the block diagram in which drawing 2 shows physical structure, the ** type view showing the contents of storage of the PLU memory by which drawing 3 is equivalent to an information-storage means, the flow chart with which drawing 4 shows the data-processing method of the form this operation, and drawing 5 are the ** type views showing the contents of storage of the PLU memory of the example of a changed completely type.

[0038] First, as POS terminal 21 illustrated as a data processor with the form of this operation is also shown in drawing 2 , the main control section 22 which consists of a microcomputer is provided, and this main control section 22 possesses ROM24 and RAM25 which are CPU23 and the information-storage medium which are a subject of a computer.

[0039] The system bus 26 is connected to the main control section 22, and a bar code scann r 27, a keyboard 28, the displays 29 and 30 the object for customers and for salesclerks, the PLU memory 31 equivalent to an information-storage means, main memory 32, the R/J printer 33, communication I/F34, etc. are connected to this system bus 26.

[0040] The PLU memory 31 consists of a storage area of mass information-storage media, such as HDD, too, and goods information is stored in advance for a majority of every selling goods. However, in POS terminal 21 of the form of this operation, as shown in drawing 3 , the message flag and the goods message are added to the goods information stored in the PLU memory 31. The message flag of goods information consists of bit data in which the existence of a goods message is shown, and a goods message consists of a test data of guidance of use of the selling goods, or notes of maintenance, for example.

[0041] In POS terminal 21 of the form of this operation, for example, the proper control program is stored in ROM24 of the main control section 22 in advance, and when CPU23 p rforms proper

data processing corresponding to a control program or input data, various meanses are realized as various meanses. As such various meanses, POS terminal 21 of the form of this op ration possesses logically the information-storage means 41, the information input means 42, th information read-out means 43, the goods registration means 44, the information-display means 45, the information printing means 46, etc., as shown in drawing 1 .

[0042] The information-storage means 41 is equivalent to the PLU memory 31 as mentioned above, and the goods information which consists of a bar code, a goods name, the selling price, a message flag, a goods message, etc. is stored in advance for a majority of every selling goods. The information input means 42 receives the alter operation of a bar code, when the main control section 22 receives the input data of a bar code scanner 27 or a keyboard 28.

[0043] The information read-out means 43 reads goods information from the information-storage means 41 by using as a search key the bar code by which alter operation was carried out, when the main control section 22 accesses the PLU memory 31 corresponding to the above input data and control programs. The goods registration means 44 performs registration processing based on the read goods information, when the main control section 22 makes various information store temporarily at main memory 32.

[0044] The information-display means 45 carries out the display output of the various information relevant to the registration processing performed, when the main control section 22 carries out the display output of the various information to displays 29 and 30. When the main control section 22 carries out the printout of the various information to the R/J printer 33, the information printing means 46 carries out the printout of the various information relevant to the performed registration processing, and publishes a receipt.

[0045] In POS terminal 21 of the form of this operation, when the information-display means 45 carries out the display output of the various information relevant to registration processing on displays 29 and 30 as mentioned above, the display output also of the goods message stored in the PLU memory 31 as a part of goods information is carried out. Furthermore, when the information printing means 46 carries out the printout of the various information relevant to registration processing to a receipt by the R/J printer 33 as mentioned above, the printout also of the goods message is carried out to this receipt.

[0046] In addition, in POS terminal 21 of the form of this operation, the display 29 whose information-display means 45 is a display for customers, and the display 30 which is a display for salesclerks are provided, and it is set up so that the display output of the goods message may be carried out to both displays 29 and 30 here. Moreover, although the R/J printer 33 of the information printing means 46 carries out the printout of the various information on the same contents to a receipt and a journal, a goods message is printed only in the receipt for customers, and it is set to the journal for stores so that it may not print.

[0047] Although the above POS-terminal various meanses are realized as occasion demands using the hardware of a keyboard 28, a display 29, and 30 grades, the subject is realized when CPU23 operates corresponding to the software written in the ROM24 grade.

[0048] Such software For example, the thing for which the alter operation of the bar code by the bar code scanner 27 or keyboard 28 grade is received, Goods information is read from the PLU memory 31 by using as a search key the bar code by which alter operation was carried out, The display output of the various information relevant to the registration processing performed is carried out [performing registration processing based on the read goods information,] to displays 29 and 30, It is stored in the information-storage medium of RAM25 grade as a control program for making CPU23 grade perform processing operation of carrying out the printout of the various information relevant to the performed registration processing to the R/J printer 33.

[0049] In the above composition, the data-processing method in case POS terminal 21 of the form of this operation carries out registration processing of the selling goods is explained below. First, if the selling goods with which a customer wishes to purchase are gathered in th position of POS terminal 21 where a salesclerk stands by, a salesclerk will make a bar code scanner 27 carry out the reading scan of the bar code of the label given to selling goods, or will input the bar code of a label manually on a keyboard 28, and will do alter operation of the bar code to POS terminal 21.

[0050] If a bar code is inputted at this time as POS terminal 21 of the form of this op ration is shown in <u>drawing 4</u> (Step T1), "0/1" of the message flags of the goods information which goods information was read from the PLU memory 31 by the main control section 22 as a search key (Step T2), and was read in this way in this will be judged by the main control section 22 (Step T3).

[0051] When this message flag is "1", a goods message is also read from the PLU memory 31 (Step S4), and a display output is carried out to the displays 29 and 30 the object for customers, and for salesclerks with a goods name or the selling price (Step T5). On the other hand, when a message flag is "0", a goods message is not read from the PLU memory 31, but the display output only of the goods name and the selling price of goods information in which a goods message is not contained is carried out to displays 29 and 30.

[0052] Various information, such as a bar code, is accumulated in the above state at main memory 32, and registration processing of selling goods is performed (Step T6). A charge and change will be delivered and received by the customer and the salesclerk, and if such registration processing is performed for every selling goods of all of which a customer expects purchase (Step T7) and registration processing is completed with all selling goods, settlement-of-accounts processing will be performed (Step T8).

[0053] Thus, if settlement-of-accounts processing is completed, the various information relevant to the performed registration processing will be read from main memory 32 by the main control section 22, even the R/J printer 33 will be transmitted, a printout will be carried out to the continuation sheet whose various information is 2 runs by this R/J printer 33, and a receipt and a journal will be published (Step T9).

[0054] At this time, as mentioned above, to the selling goods with which the goods message was read for the message flag by "1", a goods message is also printed by the receipt and a goods message is not printed by the receipt to the selling goods with which a goods message was not read for a message flag by "0" with the goods name or selling price.

[0055] In POS terminal 21 of the form of this operation, when carrying out registration processing of the selling goods as mentioned above, the display output of the goods message of the selling goods is carried out to displays 29 and 30, and it can provide a customer with use of selling goods, notes of maintenance, etc. Furthermore, since the printout of the goods message of the selling goods which carried out registration processing is carried out also to a receipt, a customer can bring information, such as use of selling goods, and notes of maintenance, home.

[0056] In addition, this invention is not limited to the above-mentioned form, and permits various kinds of deformation in the range which does not deviate from the summary. For example, with the above-mentioned form, it illustrated also setting a goods message as a series of goods information with a bar code, a goods name, etc., and storing in the PLU memory 11 of the piece which is an information-storage means.

[0057] However, as shown in <u>drawing 5</u> , it is also possible to form separately the goods information-storage section 51 and the goods message storage section 52 in the PLU memory which is an information-storage means as two data files etc., to store in the goods information-storage section 51 in advance the goods information to which the identification information of a goods message was given with a bar code or the selling price, and to store a goods message in the goods message storage section 52 in advance with identification information.

[0058] In this case, the main control section used as an information read-out means should just read a goods message from the goods message storage section 52 by using identification information of the read goods information as a search key, after reading goods information from the goods information-storage section 51 by using a bar code as a search key. At this time, read-out processing of the goods message which is not stored is not performed by checking the message flag of goods information.

[0059] Making it be a ****, by things, since a goods message can be shared with two or more selling goods, the storage capacity of the PLU memory used as an information-storage means can be cut down, and the registration work of goods information can also be simplified.

[0060] Moreover, although it illustrated that POS terminal 21 provided a customer with a goods message by both the display output of a display 29, and the printout of the R/J printer 33 with

the above-mentioned form, it is also possible to make this into one sid .

[0061] When providing a customer with a goods message only by the display output of a display 29, a customer can be provided with the goods message of selling goods simultaneously with registration processing, the contents of printing of a receipt can be cut down, and a continuation sheet can also be saved. When providing a customer with a goods message only by the printout of the R/J printer 33, a customer can bring an important goods message home and simple devices, such as a Light Emitting Diode (Light Emitting Diode) display of a segment method, can also be used as a display 29.

[0062] Furthermore, although it illustrated that POS terminal 21 carried out the display output of the goods message for a goods message on both displays 29 and 30 the object for customers, and for salesclerks with the above-mentioned form, it is also possible to make this into one side.

[0063] When carrying out the display output of the goods message only on the display 29 for customers, it is not necessary to carry out the display output of the goods message unnecessary to a salesclerk to the display 30 for salesclerks, and a device simple as a display 30 for salesclerks can be used. When carrying out the display output of the goods message only on the display 30 for salesclerks, a customer can be provided with more effective service because can use a device simple as a display 29 for customers, for example, a salesclerk reports a goods message to a customer orally.

[0064] Moreover, with the above-mentioned gestalt, when CPU23 operated according to the control program stored in the ROM24 grade as software, it illustrated that the various meanses of POS terminal 21 were realized. However, it is also possible to also form each of such various meanses as peculiar hardware and to form a part as hardware, while it is possible and storing in ROM24 grade by making a part into software.

[0065]

[Effect of the Invention] Since this invention is constituted as explained above, an effect which is indicated below is done so.

[0066] An information-storage means by which the goods information to which the data processor of invention according to claim 1 possesses a bar code and the selling price respectively at least is stored in advance for a majority of every selling goods, An information input means to receive the alter operation of a bar code, and the information read-out means which reads goods information from the aforementioned information-storage means by using as a search key the bar code by which alter operation was carried out, In the data processor possessing a goods registration means to perform registration processing based on the read goods information, and the information-display means which carries out the display output of the various information relevant to the registration processing performed By setting up a series of goods messages relevant to selling goods as a part of goods information stored in the aforementioned information-storage means, and carrying out the display output also of the goods message of goods information at the time of execution of registration processing of the aforementioned information-display means Since the display output of the goods message of selling goods is carried out when carrying out registration processing of the selling goods, a customer can be provided with various and detailed information, such as use of selling goods, and notes of maintenance.

[0067] An information-storage means by which the goods information to which the data processor of invention according to claim 2 possesses a bar code and the selling price respectively at least is stored in advance for a majority of every selling goods, An information input means to receive the alter operation of a bar code, and the information read-out means which reads goods information from the aforementioned information-storage means by using as a search key the bar code by which alter operation was carried out, In the data processor possessing a goods registration means to perform registration processing based on the read goods information, and an information printing means to carry out the printout of the various information relevant to the performed registration processing, and to publish a receipt By setting up a series of goods messages relevant to selling goods as a part of goods information stored in the aforementioned information-storage means, and carrying out the printout also of the goods

message of the goods information by which registration processing of the aforem ntioned information printing means was carried out to a receipt Since the printout of the goods message of selling goods is carried out to the receipt published when registration processing of the selling goods is carried out, a customer can be provided with various and detailed information, such as use of selling goods, and notes of maintenance.

[0068] The message flag which shows the existence of a goods message as a part of goods information by which invention according to claim 3 is stored in advance in the aforementioned information-storage means in the data processor according to claim 1 or 2 is set up, and the aforementioned information read-out means can prevent the read-out processing to the goods message which is not registered by performing read-out processing of a goods message corresponding to a message flag. Invention according to claim 4 is set to a claim 1 or the data processor of any 1 publication of 3. The aforementioned information-storage means possesses the goods information-storage section and the goods message storage section. the aforementioned goods information-storage section The goods information to which the identification information of a goods message was given is stored in a bar code and the selling. price in advance at least. the aforementioned goods message storage section The goods message is stored in advance with identification information. an information read-out means While reading goods information from the aforementioned goods information-storage section by using a bar code as a search key Since it is possible to share a goods message for two or more goods information by reading a goods message from the aforementioned goods message storage section by using identification information of the read goods information as a search key, the storage capacity of an information-storage means is reducible.

[0069] An information-display means can provide a customer with a goods message simultaneously with registration processing of selling goods, when invention according to claim 5 possesses the display for customers, and the display for salesclerks separately in a data processor according to claim 1 and carries out the display output of the goods message of goods information to the display for customers. A salesclerk seems to be able to provide a customer with the goods message of the selling goods which carry out registration processing of the invention according to claim 6 by the information-display means' possessing the display for customers, and the display for salesclerks separately, and carrying out the display output of the goods message of goods information to the display for salesclerks in a data processor according to claim 1 orally.

[0070] An information-storage means by which the goods information to which the data-processing method of invention according to claim 7 possesses a bar code and the selling price respectively at least is stored in advance for a majority of every selling goods, An information input means to receive the alter operation of a bar code, and the information read-out means which reads goods information from the aforementioned information-storage means by using as a search key the bar code by which alter operation was carried out, In the data-processing method of the data processor possessing a goods registration means to perform registration processing based on the read goods information, and the information-display means which carries out the display output of the various information relevant to the registration processing performed By setting up a series of goods messages relevant to selling goods as a part of goods information stored in the aforementioned information-storage means, and having been made to carry out the display output also of the goods message of goods information to the aforementioned information-display means at the time of execution of registration processing Since the display output of the goods message of selling goods is carried out when carrying out registration processing of the selling goods, a customer can be provided with various and detailed information, such as use of selling goods, and notes of maintenance.

[0071] An information-storage means by which the goods information to which the data-processing method of invention according to claim 8 possesses a bar code and the selling price respectively at least is stored in advance for a majority of every selling goods, An information input means to receive the alter operation of a bar code, and the information read-out means which reads goods information from the aforementioned information-storage means by using as a search key the bar code by which alter operation was carried out, In the data-processing m thod

of the data proc ssor possessing a goods registration means to perform r gistration proc ssing based on the read goods information, and an information printing means to carry out the printout of the various information relevant to the performed registration processing, and to publish a receipt A series of goods messages relevant to selling goods are set up as a part of goods information stored in the aforementioned information-storage means. Since the printout of the goods message of selling goods is carried out to the receipt published when registration processing of the selling goods is carried out by having made it make a receipt carry out the printout also of the goods message of the goods information by which registration processing was carried out to the aforementioned information printing means A customer can be provided with various and detailed information, such as use of selling goods, and notes of maintenance.

[Translation done.]

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TECHNICAL FIELD

[The technical field to which invention belongs] this invention relates to the data processor and
method of carrying out registration processing of the selling goods.

[Translation done.]

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PRIOR ART

[Description of the Prior Art] Conventionally, data processors, such as an electronic cash register and a POS (PointOf Sales) terminal, are used for registration processing of selling goods. The 1 conventional example of such a data processor is explained below with reference to drawing 6 or drawing 8 . In addition, the block diagram showing the physical structure of a POS terminal where drawing 6 is a data processor, the ** type view showing the content of storage of the PLU memory by which drawing 7 is equivalent to an information-storage means, and drawing 8 are flow charts which show the data-processing method of a POS terminal.
[0003] First, POS terminal 1 illustrated as a data processor here possesses the main control section 2 which consists of a microcomputer, as shown in drawing 6 . This main control section 2 possesses CPU (Central ProcessingUnit)3 as a subject of a computer, and ROM (ReadOnly Memory)4 and RAM (Random Access Memory)5 are connected to this CPU3 as an information-storage medium.
[0004] The storage area where ROM4 is carrying out fixed storage of the software, such as a control program of CPU3, in advance, and RAM5 stores the processed data of CPU3 etc. temporarily is secured, and performs various kinds of data processing corresponding to a control program, input data, etc. with proper CPU3.
[0005] The system bus 6 is connected to the main control section 2, and a bar code scanner 7, a keyboard 8, the displays 9 and 10 the object for customers and for salesclerks, the PLU (Price Look Up) memory 11, main memory 12, the R/J (Receipt/Journal) printer 13, communication I/F (Interface)14, etc. are connected to this system bus 6.
[0006] A bar code scanner 7 consists of a laser light source, a photo detector, a decoder, etc., carries out the reading scan of the bar code given to selling goods with the label etc., and inputs a bar code. The keyboard 8 possesses the ten key, the PLU key, etc., and various information, such as a bar code, is inputted by manual operation.
[0007] The displays 9 and 10 the object for customers and for salesclerks consist of LCD (Li1uid Crystal Display) and CRT (Cathode-Ray Tube) which carry out the display output of the various information by the dot matrix, and display respectively various information relevant to registration processing, such as a goods name and the selling price, on a customer and a salesclerk.
[0008] The PLU memory 11 consists of a storage area of mass information-storage media, such as HDD (Hard Disc Drive), and as shown in drawing 7 , the goods information which consists of a bar code, a goods name, and the selling price here is stored in advance for a majority of every selling goods. Main memory 12 also consists of a storage area of a mass information-storage medium, and accumulates the various information relevant to registration processing.
[0009] The R/J printer 13 consists of a thermal printer which uses the continuation sheet of 2 run as a print sheet, carries out the printout of the various information relevant to the performed registration processing, such as a goods name and the selling price, to the continuation sheet of 2 run, and publishes the receipt for customers, and the journal for stores.
[0010] The communication networks 15, such as LAN (Local Area Network), are connect d to communication I/F14, and a majority of other POS terminals and host computers (not shown [both]) which are piece at least are connected to this communication network 15.

Communication I/F14 receives various information, such as th n west goods information stored in the PLU memory 11, from a host computer while transmitting various information, such as processing information accumulated at main memory 12, to a host computer.

[0011] POS terminal 1 of the above structures can perform registration processing of selling goods. More, if the selling goods with which a customer expects purchase of a detail are gathered in the position of POS terminal 1 where a salesclerk stands by, a salesclerk will make a bar code scanner 7 carry out the reading scan of the bar code of the label given to selling goods, or will input the bar code of a label manually on a keyboard 8, and will do alter operation of the bar code to POS terminal 1.

[0012] If a bar code is inputted as POS terminal 1 is shown in drawing 8 (Step S1), the main control section 2 will read goods information for this from the PLU memory 11 as a search key (Step S2). Thus, the display output of the goods name and the selling price of goods information which were read is carried out to the displays 9 and 10 the object for customers, and for salesclerks by the main control section 2 (Step S3), various information, such as a bar code, is accumulated at main memory 12, and registration processing of selling goods is performed (step S4).

[0013] A charge and change will be delivered and received by the customer and the salesclerk, and if the above registration processings are performed for every selling goods of all of which a customer expects purchase (Step S5) and registration processing is completed with all selling goods, settlement-of-accounts processing will be performed (Step S6). Thus, if settlement-of-accounts processing is completed, the various information relevant to the performed registration processing will be read from main memory 12 by the main control section 2, even the R/J printer 13 will be transmitted, a printout will be carried out to the continuation sheet whose various information is 2 runs by this R/J printer 13, and the receipt for customers and the journal for stores will be published (Step S7).

[Translation done.]

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EFFECT OF THE INVENTION

[Effect of the Invention] Since this invention is constituted as explained above, an effect which is indicated below is done so.

[0066] An information-storage means by which the goods information to which the data · processor of invention according to claim 1 possesses a bar code and the selling price respectively at least is stored in advance for a majority of every selling goods, An information input means to receive the alter operation of a bar code, and the information read-out means which reads goods information from the aforementioned information-storage means by using as a search key the bar code by which alter operation was carried out, In the data processor possessing a goods registration means to perform registration processing based on the read goods information, and the information-display means which carries out the display output of the various information relevant to the registration processing performed A series of goods messages relevant to selling goods are set up as a part of goods information stored in the aforementioned information-storage means. Since the display output of the goods message of selling goods is carried out when carrying out registration processing of the selling goods by carrying out the display output also of the goods message of goods information at the time of execution of registration processing of the aforementioned information-display means, a customer can be provided with various and detailed information, such as use of selling goods, and notes of maintenance.

[0067] An information-storage means by which the goods information to which the data processor of invention according to claim 2 possesses a bar code and the selling price · respectively at least is stored in advance for a majority of every selling goods, An information input means to receive the alter operation of a bar code, and the information read-out means which reads goods information from the aforementioned information-storage means by using as a search key the bar code by which alter operation was carried out, In the data processor possessing a goods registration means to perform registration processing based on the read goods information, and an information printing means to carry out the printout of the various information relevant to the performed registration processing, and to publish a receipt A series of goods messages relevant to selling goods are set up as a part of goods information stored in the aforementioned information-storage means. Since the printout of the goods message of selling goods is carried out to the receipt published when registration processing of the selling goods is carried out by carrying out the printout also of the goods message of the goods information by which registration processing of the aforementioned information printing means was carried out to a receipt, a customer can be provided with various and detailed information, such as use of selling goods, and notes of maintenance.

[0068] The message flag which shows the existence of a goods message as a part of goods information by which invention according to claim 3 is stored in advance in the aforementioned information-storage means in the data processor according to claim 1 or 2 is set up, and the aforem ntioned information read-out means can prevent the read-out processing to the goods message which is not registered by performing read-out processing of a goods message corresponding to a message flag. In a claim 1 or the data processor of any 1 publication of 3, as for invention according to claim 4, the aforementioned information-storage means possesses the

goods information-storage section and the goods m ssage storage section. As for th aforementioned goods information-storage section, the goods information to which the identification information of a goods message was given is stored in a bar code and the selling price in advance at least. the aforementioned goods message storage section The goods message is stored in advance with identification information. an information read-out means While reading goods information from the aforementioned goods information-storage section by using a bar code as a search key Since it is possible to share a goods message for two or more goods information by reading a goods message from the aforementioned goods message storage section by using identification information of the read goods information as a search key, the storage capacity of an information-storage means is reducible.

[0069] An information-display means can provide a customer with a goods message simultaneously with registration processing of selling goods, when invention according to claim 5 possesses the display for customers, and the display for salesclerks separately in a data processor according to claim 1 and carries out the display output of the goods message of goods information to the display for customers. A salesclerk seems to be able to provide a customer with the goods message of the selling goods which carry out registration processing of the invention according to claim 6 by the information-display means' possessing the display for customers, and the display for salesclerks separately, and carrying out the display output of the goods message of goods information to the display for salesclerks in a data processor according to claim 1 orally.

[0070] An information-storage means by which the goods information to which the data-processing method of invention according to claim 7 possesses a bar code and the selling price respectively at least is stored in advance for a majority of every selling goods, An information input means to receive the alter operation of a bar code, and the information read-out means which reads goods information from the aforementioned information-storage means by using as a search key the bar code by which alter operation was carried out, In the data-processing method of the data processor possessing a goods registration means to perform registration processing based on the read goods information, and the information-display means which carries out the display output of the various information relevant to the registration processing performed By setting up a series of goods messages relevant to selling goods as a part of goods information stored in the aforementioned information-storage means, and having been made to carry out the display output also of the goods message of goods information to the aforementioned information-display means at the time of execution of registration processing Since the display output of the goods message of selling goods is carried out when carrying out registration processing of the selling goods. A customer can be provided with various and detailed information, such as use of selling goods, and notes of maintenance.

[0071] An information-storage means by which the goods information to which the data-processing method of invention according to claim 8 possesses a bar code and the selling price respectively at least is stored in advance for a majority of every selling goods, An information input means to receive the alter operation of a bar code, and the information read-out means which reads goods information from the aforementioned information-storage means by using as a search key the bar code by which alter operation was carried out, In the data-processing method of the data processor possessing a goods registration means to perform registration processing based on the read goods information, and an information printing means to carry out the printout of the various information relevant to the performed registration processing, and to publish a receipt A series of goods messages relevant to selling goods are set up as a part of goods information stored in the aforementioned information-storage means. Since the printout of the goods message of selling goods is carried out to the receipt published when registration processing of the selling goods is carried out by having made it make a receipt carry out the printout also of the goods message of the goods information by which registration processing was carried out to the aforementioned information printing means. A custom r can be provided with various and detailed information, such as use of selling goods, and notes of maintenance.

[Translation done.]

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TECHNICAL PROBLEM

[Problem(s) to be Solved by the Invention] At above POS terminals 1, if the bar code of selling goods is inputted by the bar code scanner 7 or the keyboard 8, goods information is read from the PLU memory 11, registration processing is carried out, the various information which expressed the various information which carries out registration processing as displays 9 and 10, or carried out registration processing will be printed by the R/J printer 13, and registration processing.of selling goods will be performed.

[0015] However, in above POS terminals 1, the various information by which a display output is carried out on displays 9 and 10, or a printout is carried out by the R/J printer 13 is goods names, the selling prices, etc. of selling goods, and cannot provide a customer with the various and detailed information relevant to selling goods.

[0016] this invention is made in view of the above technical problems, and it aims at offering the data processor and method of providing a customer with the various and detailed information relevant to selling goods.

[Translation done.]

MEANS

[Means for Solving the Problem] An information-storage means by which the goods information to which the data processor of 1 of this invention possesses a bar code and the selling price respectively at least is stored in advance for a majority of every selling goods, An information input means to receive the alter operation of a bar code, and the information read-out means which reads goods information from the aforementioned information-storage means by using as a search key.the bar code by which alter operation was carried out, In the data processor possessing a goods registration means to perform registration processing based on the read goods information, and the information-display means which carries out the display output of the various information relevant to the registration processing performed A series of goods messages relevant to selling goods are set up as a part of goods information stored in the aforementioned information-storage means, and the aforementioned information-display means carries out the display output also of the goods message of goods information at the time of execution of registration processing.

[0018] Therefore, if the alter operation of a bar code is received by the information input means when carrying out registration processing of the selling goods, goods information will be read from an information-storage means by the information read-out means by using as a search key this bar code by which alter operation was carried out. Thus, while registration processing is performed by the goods registration means based on the read goods information, the display output of the various information relevant to this registration processing performed is carried out by the information-display means.

[0019] Since the display output also of a series of goods messages stored in the information-storage means in advance as a part of goods information is carried out when the display output of the various information relevant to registration processing is carried out by the information-display means as mentioned above, a customer is provided with the various and detailed information relevant to selling goods.

[0020] In addition, the data processor as used in the field of this invention is equipment used for registration processing of selling goods, and the POS terminal connected to the host computer, the electronic cash register of a stand-alone, etc. are permitted. A series of various and detailed messages with useful providing for a customer in relation to a goods message at the selling goods are meant, for example, use of selling goods, guidance of notes of maintenance, etc. are permitted.

[0021] Moreover, the storage area of information-storage media, such as HDD and RAM, etc. is permitted that the information-storage means as used in the field of this invention should just be what can memorize the goods information on much selling goods. Other various meanses permit the hardware of exclusive use, the computer by which the proper function was given by the program, the functions realized inside the computer by the proper program, such combination, and ** that what is necessary is to just be formed so that the function may be realized.

[0022] An information-storage means by which th goods information to which other data processors of this invention possess a bar code and the selling price resp ctively at least is stored in advance for a majority of very selling goods, An information input m ans to receive the alter operation of a bar code, and the information r ad-out means which reads goods

information from the aforementioned information-storage means by using as a s arch key the bar code by which alter operation was carried out, In the data processor possessing a goods registration means to perform registration processing based on the read goods information, and an information printing means to carry out the printout of the various information relevant to the performed registration processing, and to publish a receipt A series of goods messages relevant to selling goods are set up as a part of goods information stored in the aforementioned information-storage means, and the printout also of the goods message of the goods information by which registration processing of the aforementioned information printing means was carried out is carried out to a receipt.

[0023] Therefore, if the alter operation of a bar code is received by the information input means when carrying out registration processing of the selling goods, goods information will be read from an information-storage means by the information read-out means by using as a search key this bar code by which alter operation was carried out. Thus, based on the read goods information, registration processing is performed by the goods registration means, and the printout of the various information relevant to this performed registration processing is carried out to a receipt by the information printing means.

[0024] Since the printout also of a series of goods messages stored in the information-storage means in advance as a part of goods information is carried out when the printout of the various information relevant to registration processing is carried out to a receipt as mentioned above, a customer is provided with the various and detailed information relevant to selling goods.

[0025] As other invention in the above data processors, the message flag which shows the existence of a goods message as a part of goods information stored in advance is set as the aforementioned information-storage means, and the aforementioned information read-out means performs read-out processing of a goods message corresponding to a message flag. Therefore, since read-out processing of a goods message is performed corresponding to a message flag when an information read-out means reads goods information from an information-storage means, read-out processing to the goods message which is not registered is not performed.

[0026] As other invention in the above data processors The aforementioned information-storage means possesses the goods information-storage section and the goods message storage section. the aforementioned goods information-storage section The goods information to which the identification information of a goods message was given is stored in a bar code and the selling price in advance at least. the aforementioned goods message storage section The goods message is stored in advance with identification information. an information read-out means While reading goods information from the aforementioned goods information-storage section by using a bar code as a search key, a goods message is read from the aforementioned goods message storage section by using identification information of the read goods information as a search key.

[0027] Therefore, when an information read-out means reads goods information from an information-storage means by using a bar code as a search key, goods information is first read from the goods information-storage section, and a goods message is read from the goods message storage section by using the identification information as a search key.

[0028] As other invention in the above data processors, the information-display means possesses the display for customers, and the display for salesclerks separately, and carries out the display output of the goods message of goods information to the display for customers. Therefore, a customer is directly provided with the various and detailed information relevant to selling goods by the display output of the goods message by the display for customers.

[0029] As other invention in the above data processors, the information-display means possesses the display for customers, and the display for salesclerks separately, and carries out the display output of the goods message of goods information to the display for salescl rks. Therefore, since the display output of the goods message is carried out to a salesclerk by the display for salesclerks, a visitor is orally provided with the various and detailed information relevant to selling goods by this sal scl rk, for example.

[0030] An information-storage m ans by which the goods information to which the data-processing method of 1 of this invention possesses a bar code and the selling price respectively

at least is stored in advance for a majority of every s lling goods, An information input m ans to receive the alter operation of a bar code, and the information read-out m ans which reads goods information from the aforementioned information-storage means by using as a search key the bar code by which alter operation was carried out, In the data-processing method of the data processor possessing a goods registration means to perform registration proc ssing based on the read goods information, and the information-display m ans which carries out the display output of the various information relevant to the registration processing performed A series of goods messages relevant to selling goods are set up as a part of goods information stored in the aforementioned information-storage means, and it was made to carry out the display output also of the goods message of goods information to the aforementioned information-display means at the time of execution of registration processing.

[0031] Therefore, if the alter operation of a bar code is received by the information input means when carrying out registration processing of the selling goods, goods information will be read from an information-storage means by the information read-out means by using as a search key this bar code by which alter operation was carried out. Thus, while registration processing is performed by the goods registration means based on the read goods information, the display output of the various information relevant to this registration processing performed is carried out by the information-display means.

[0032] Since the display output also of a series of goods messages stored in the information-storage means in advance as a part of goods information is carried out when the display output of the various information relevant to registration processing is carried out by the information-display means as mentioned above, a customer is provided with the various and detailed information relevant to selling goods.

[0033] An information-storage means by which the goods information to which other data-processing methods of this invention possess a bar code and the selling price respectively at least is stored in advance for a majority of every selling goods, An information input means to receive the alter operation of a bar code, and the information read-out means which reads goods information from the aforementioned information-storage means by using as a search key the bar code by which alter operation was carried out, In the data-processing method of the data processor possessing a goods registration means to perform registration processing based on the read goods information, and an information printing means to carry out the printout of the various information relevant to the performed registration processing, and to publish a receipt A series of goods messages relevant to selling goods are set up as a part of goods information stored in the aforementioned information-storage means, and it was made to make a receipt carry out the printout also of the goods message of the goods information by which registration processing was carried out to the aforementioned information printing means.

[0034] Therefore, if the alter operation of a bar code is received by the information input means when carrying out registration processing of the selling goods, goods information will be read from an information-storage means by the information read-out means by using as a search key this bar code by which alter operation was carried out. Thus, based on the read goods information, registration processing is performed by the goods registration means, and the printout of the various information relevant to this performed registration processing is carried out to a receipt by the information printing means.

[0035] Since the printout also of a series of goods messages stored in the information-storage means in advance as a part of goods information is carried out when the printout of the various information relevant to registration processing is carried out to a receipt as mentioned above, a customer is provided with the various and detailed information relevant to selling goods.

[0036]
[Embodiments of the Invention] One gestalt of operation of this invention is explained below with reference to drawing 1 or drawing 4 . In addition, detailed explanation is omitted using a name with the same, same portion as the 1 conventional example mentioned above about the gestalt of this operation.

[0037] The ** type view showing the logical configuration of the POS terminal whose drawing 1 is the data processor of the gestalt of this operation, the block diagram in which drawing 2

shows physical structure, the ** type vi w showing the cont nt of storage of the PLU m mory by which drawing 3 is equivalent to an information-storage means, the flow chart with which drawing 4 shows the data-processing m thod of the gestalt this operation, and drawing 5 are the ** type views showing the content of storage of the PLU memory of the example of a changed completely type.

[0038] First, as POS terminal 21 illustrated as a data processor with the gestalt of this operation is also shown in drawing 2 , the main control section 22 which consists of a microcomputer is provided, and this main control section 22 possesses ROM24 and RAM25 which are CPU23 and the information-storage medium which are a subject of a computer.

[0039] The system bus 26 is connected to the main control section 22, and a bar code scanner 27, a keyboard 28, the displays 29 and 30 the object for customers and for salesclerks, the PLU memory 31 equivalent to an information-storage means, main memory 32, the R/J printer 33, communication I/F34, etc. are connected to this system bus 26.

[0040] The PLU memory 31 consists of a storage area of mass information-storage media, such as HDD, too, and goods information is stored in advance for a majority of every selling goods. However, in POS terminal 21 of the gestalt of this operation, as shown in drawing 3 , the message flag and the goods message are added to the goods information stored in the PLU memory 31. The message flag of goods information consists of bit data in which the existence of a goods message is shown, and a goods message consists of a test data of guidance of use of the selling goods, or notes of maintenance, for example.

[0041] In POS terminal 21 of the gestalt of this operation, for example, the proper control program is stored in ROM24 of the main control section 22 in advance, and when CPU23 performs proper data processing corresponding to a control program or input data, various meanses are realized as various functions. As such various meanses, POS terminal 21 of the gestalt of this operation possesses logically the information-storage means 41, the information input means 42, the information read-out means 43, the goods registration means 44, the information-display means 45, the information printing means 46, etc., as shown in drawing 1 .

[0042] The information-storage means 41 is equivalent to the PLU memory 31 as mentioned above, and the goods information which consists of a bar code, a goods name, the selling price, a message flag, a goods message, etc. is stored in advance for a majority of every selling goods. The information input means 42 receives the alter operation of a bar code, when the main control section 22 receives the input data of a bar code scanner 27 or a keyboard 28.

[0043] The information read-out means 43 reads goods information from the information-storage means 41 by using as a search key the bar code by which alter operation was carried out, when the main control section 22 accesses the PLU memory 31 corresponding to the above input data and control programs. The goods registration means 44 performs registration processing based on the read goods information, when the main control section 22 makes various information store temporarily at main memory 32.

[0044] The information-display means 45 carries out the display output of the various information relevant to the registration processing performed, when the main control section 22 carries out the display output of the various information to displays 29 and 30. When the main control section 22 carries out the printout of the various information to the R/J printer 33, the information printing means 46 carries out the printout of the various information relevant to the performed registration processing, and publishes a receipt.

[0045] In POS terminal 21 of the form of this operation, when the information-display means 45 carries out the display output of the various information relevant to registration processing on displays 29 and 30 as mentioned above, the display output also of the goods message stored in the PLU memory 31 as a part of goods information is carried out. Furthermore, when the information printing means 46 carries out the printout of the various information relevant to registration processing to a receipt by the R/J printer 33 as mentioned above, the printout also of the goods message is carried out to this receipt.

[0046] In addition, in POS terminal 21 of the gestalt of this operation, the display 29 whose information-display m ans 45 is a display for customers, and the display 30 which is a display for salescl rks are provided, and it is set up so that the display output of the goods message may be

carried out to both displays 29 and 30 here. Moreover, although the R/J printer 33 of th information printing means 46 carries out the printout of the various information on the same content to a receipt and a journal, a goods message is printed only in the receipt for customers, and it is set to the journal for stores so that it may not print.

[0047] Although the above POS-terminal various meanses are realized as occasion demands using the hardware of a keyboard 28, a display 29, and 30 grades, the subject is realized when CPU23 operates corresponding to the software written in the ROM24 grade.

[0048] Such software For example, the thing for which the alter operation of the bar code by the bar code scanner 27 or keyboard 28 grade is received, Goods information is read from the PLU memory 31 by using as a search key the bar code by which alter operation was carried out, The display output of the various information relevant to the registration processing performed is carried out [performing registration processing based on the read goods information,] to displays 29 and 30, It is stored in the information-storage medium of RAM25 grade as a control program for making CPU23 grade perform processing operation of carrying out the printout of the various information relevant to the performed registration processing to the R/J printer 33.

[0049] In the above composition, the data-processing method in case POS terminal 21 of the gestalt of this operation carries out registration processing of the selling goods is explained below. First, if the selling goods with which a customer wishes to purchase are gathered in the position of POS terminal 21 where a salesclerk stands by, a salesclerk will make a bar code scanner 27 carry out the reading scan of the bar code of the label given to selling goods, or will input the bar code of a label manually on a keyboard 28, and will do alter operation of the bar code to POS terminal 21.

[0050] If a bar code is inputted at this time as POS terminal 21 of the gestalt of this operation is shown in drawing 4 (Step T1), "0/1" of the message flags of the goods information which goods information was read from the PLU memory 31 by the main control section 22 as a search key (Step T2), and was read in this way in this will be judged by the main control section 22 (Step T3).

[0051] When this message flag is "1", a goods message is also read from the PLU memory 31 (step S4), and a display output is carried out to the displays 29 and 30 the object for customers, and for salesclerks with a goods name or the selling price (Step T5). On the other hand, when a message flag is "0", a goods message is not read from the PLU memory 31, but the display output only of the goods name and the selling price of goods information in which a goods message is not contained is carried out to displays 29 and 30.

[0052] Various information, such as a bar code, is accumulated in the above state at main memory 32, and registration processing of selling goods is performed (Step T6). A charge and change will be delivered and received by the customer and the salesclerk, and if such registration processing is performed for every selling goods of all of which a customer expects purchase (Step T7) and registration processing is completed with all selling goods, settlement-of-accounts processing will be performed (Step T8).

[0053] Thus, if settlement-of-accounts processing is completed, the various information relevant to the performed registration processing will be read from main memory 32 by the main control section 22, even the R/J printer 33 will be transmitted, a printout will be carried out to the continuation sheet whose various information is 2 runs by this R/J printer 33, and a receipt and a journal will be published (Step T9).

[0054] At this time, as mentioned above, to the selling goods with which the goods message was read for the message flag by "1", a goods message is also printed by the receipt and a goods message is not printed by the receipt to the selling goods with which a goods message was not read for a message flag by "0" with the goods name or selling price.

[0055] In POS terminal 21 of the gestalt of this operation, when carrying out registration processing of the selling goods as mentioned above, the display output of the goods m ssage of the selling goods is carri d out to displays 29 and 30, and it can provide a customer with use of selling goods, notes of maintenance, etc. Furthermore, since the printout of the goods m ssage of the selling goods which carried out registration processing is carried out also to a receipt, a customer can bring information, such as use of selling goods, and notes of maintenance, home.

[0056] In addition, this invention is not limited to the above-m ntion d g stalt, and permits various kinds of deformation in the range which does not deviate from the summary. For example, with the above-mentioned g stalt, it illustrated also setting a goods message as a series of goods information with a bar code, a goods name, etc., and storing in the PLU memory 11 of the piece which is an information-storage means.

[0057] However, as shown in drawing 5 , it is also possible to form separately the goods information-storage section 51 and the goods message storage section 52 in the PLU memory which is an information-storage means as two data files etc., to store in the goods information-storage section 51 in advance the goods information to which the identification information of a goods message was given with a bar code or the selling price, and to store a goods message in the goods message storage section 52 in advance with identification information.

[0058] In this case, the main control section used as an information read-out means should just read a goods message from the goods message storage section 52 by using identification information of the read goods information as a search key, after reading goods information from the goods information-storage section 51 by using a bar code as a search key. At this time, read-out processing of the goods message which is not stored is not performed by checking the message flag of goods information.

[0059] Making it be a ****, by things, since a goods message can be shared with two or more selling goods, the storage capacity of the PLU memory used as an information-storage means can be cut down, and the registration work of goods information can also be simplified.

[0060] Moreover, although it illustrated that POS terminal 21 provided a customer with a goods message by both the display output of a display 29, and the printout of the R/J printer 33 with the above-mentioned form, it is also possible to make this into one side.

[0061] When providing a customer with a goods message only by the display output of a display 29, a customer can be provided with the goods message of selling goods simultaneously with registration processing, the contents of printing of a receipt can be cut down, and a continuation sheet can also be saved. When providing a customer with a goods message only by the printout of the R/J printer 33, a customer can bring an important goods message home and simple devices, such as a Light Emitting Diode (Light Emitting Diode) display of a segment method, can also be used as a display 29.

[0062] Furthermore, although it illustrated that POS terminal 21 carried out the display output of the goods message for a goods message on both displays 29 and 30 the object for customers, and for salesclerks with the above-mentioned gestalt, it is also possible to make this into one side.

[0063] When carrying out the display output of the goods message only on the display 29 for customers, it is not necessary to carry out the display output of the goods message unnecessary to a salesclerk to the display 30 for salesclerks, and a device simple as a display 30 for salesclerks can be used. When carrying out the display output of the goods message only on the display 30 for salesclerks, a customer can be provided with more effective service because can use a device simple as a display 29 for customers, for example, a salesclerk reports a goods message to a customer orally.

[0064] Moreover, with the above-mentioned gestalt, when CPU23 operated according to the control program stored in the ROM24 grade as software, it illustrated that the various meanses of POS terminal 21 were realized. However, it is also possible to also form each of such various meanses as peculiar hardware and to form a part as hardware, while it is possible and storing in ROM24 grade by making a part into software.

[Translation done.]

* NOTICES *

1.This document has been translated by computer. So the translation may not reflect the original precisely.
2.**** shows the word which can not be translated.
3.In the drawings, any words are not translated.

DESCRIPTION OF DRAWINGS

[Brief Description of the Drawings]
[Drawing 1] It is the ** type view showing the logical configuration of the POS terminal which is the data processor of one gestalt of operation of this invention.
[Drawing 2] It is the block diagram showing the physical structure of a data processor.
[Drawing 3] It is the ** type view showing the content of storage of the PLU memory which is an information-storage means.
[Drawing 4] It is the flow chart which shows the data-processing method in case a POS terminal carries out registration processing of the selling goods.
[Drawing 5] It is the ** type view showing the content of storage of the PLU memory which is the information-storage means of the example of a changed completely type.
[Drawing 6] It is the ** type view showing the physical structure of the POS terminal which is the data processor of the 1 conventional example.
[Drawing 7] It is the ** type view showing the content of storage of PLU memory.
[Drawing 8] It is the flow chart which shows the data-processing method in case a POS terminal carries out registration processing of the selling goods.
[Description of Notations]
21 POS Terminal Which is Data Processor
22 Main Control Section Which Functions as Various Meanses
23 CPU Which is Computer
24 ROM Which is Information-Storage Medium
25 RAM Which is Information-Storage Medium
27 Bar Code Scanner
28 Keyboard
29 Display Which is Display for Customers
30 Display Which is Display for Salesclerks
31 PLU Memory equivalent to Information-Storage Means
33 R/J Printer
41 Information-Storage Means
42 Information Input Means
43 Information Read-out Means
44 Goods Registration Means
45 Information-Display Means
46 Information Printing Means

[Translation done.]
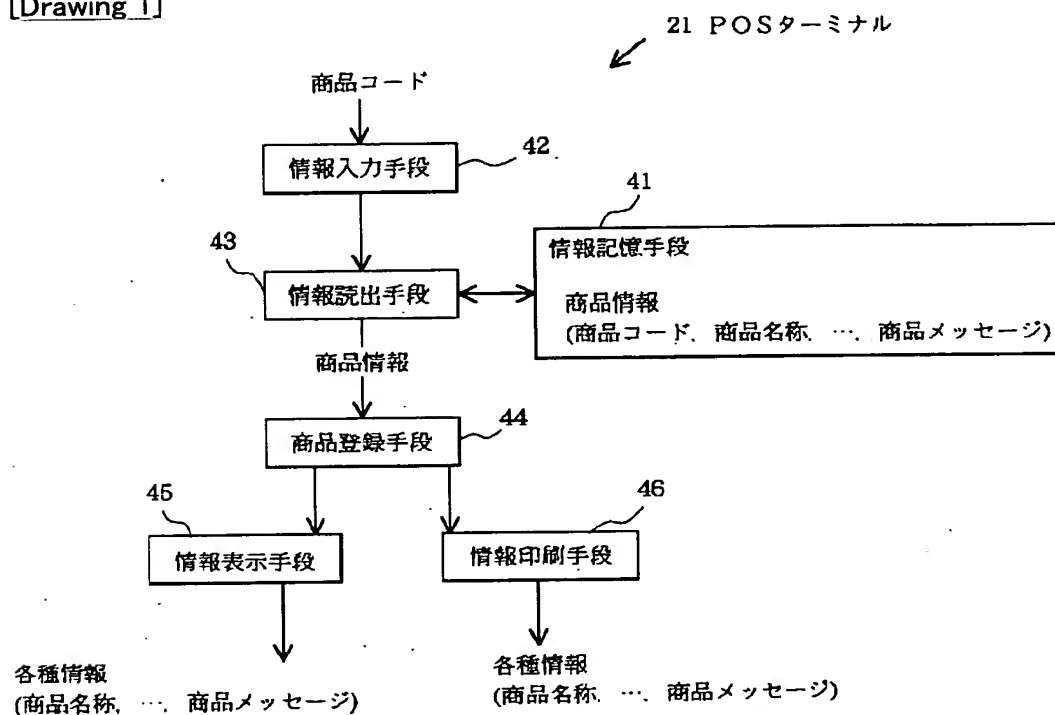
DRAWINGS

[Drawing 1]

[Drawing 2]

[Drawing 6]

[Drawing 3]

1 POS端末
3
2 メイン制御部
CPU
5 RAM ROM 4

7 バーコードスキャナ　顧客用ディスプレイ 9
8 キーボード　店員用ディスプレイ 10
11 PLUメモリ　R／Jプリンタ 13
12 メインメモリ　通信I／F
14
15 通信ネットワーク
6 システムバス

31(41)

商品コード	商品名	価格	メッセージフラグ	メッセージ内容
4912345678901	婦人皮コート	29,000	1	保管時は陰干しして、皮専用クリームを塗布してください。
4978945612302	婦人シャツ	5,900	0	
4996385274105	ウールコート	19,800	1	ドライクリーニングをしてください。
4974185296305	ジャケット	14,800	1	セットアップ商品です。スカート、パンツなど豊富に取り揃えておりますので、是非この機会にご覧ください。
4985236974107	スカート	7,900	1	アイロンをかける場合は低温で、必ず当て布をしてください。

[Drawing 4]

スタート

T1 商品コード入力？ N
Y
T2 商品コードを検索キーとして商品情報を読出
T3 メッセージフラグ＝1？ N
Y
T4 商品メッセージを読出
T5 読み出された各種情報をディスプレイに表示出力
T6 登録処理
T7 登録終了？ N
Y
T8 精算処理
T9 R／Jに印刷出力
エンド
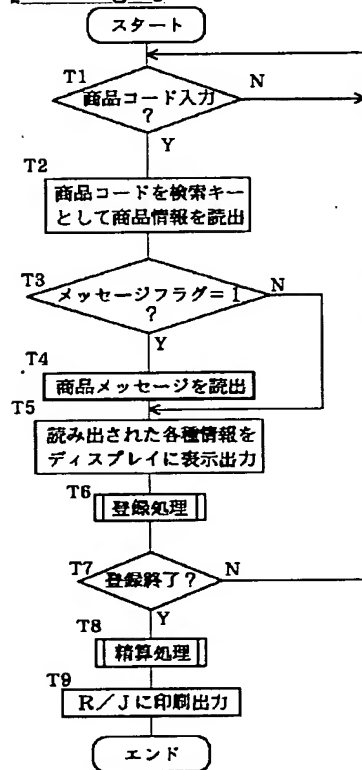
[Drawing 7]

11

商品コード	商品名	価格
4912345678901	婦人皮コート	29,000
4978945612302	婦人シャツ	5,800
4996385274105	ウールコート	19,800
4974185296305	ジャケット	14,800
4985236974107	スカート	7,900

[Drawing 8]
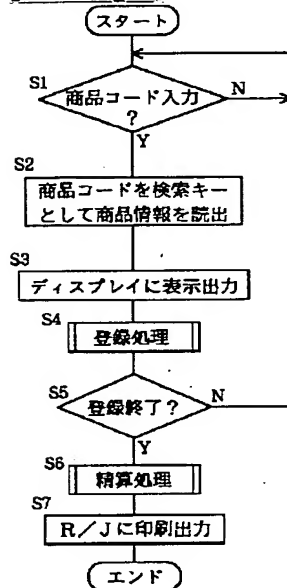
[Drawing 5]

(a)

商品コード	商品名	価格	メッセージフラグ	メッセージID
4985265479130	ブラシ	600	0	
4986325987451	ごみ袋	198	0	
4921025478545	風邪薬	1,600	1	3
4968753012001	ほうき	1,000	0	

(b)

メッセージID	メッセージ内容
1	開封後はお早めにお召し上がりください。
2	開封後は冷暗所に保管してください。
3	服用後は眠くなることがありますので、車の運転等はお避けください。
4	長時間直射日光にあてますと、変質する恐れがありますのでご注意ください。

[Translation done.]

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審査請求　有　請求項の数8　OL　（全 11 頁）
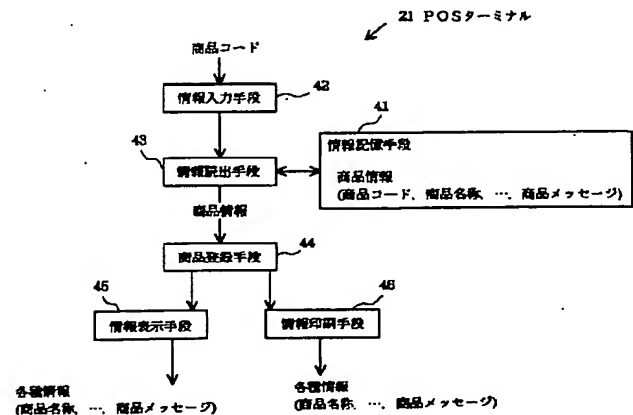
(54)【発明の名称】　データ処理装置および方法

(57)【要約】

【課題】　販売商品の使用上の注意事項などの多様で詳細な商品メッセージを顧客に提供できるようにする。

【解決手段】　情報記憶手段４１に格納しておく商品情報の一部として商品メッセージも設定しておき、登録処理の実行時に販売価格等とともに商品メッセージも表示出力したり、レシートの発行時に販売価格等とともに商品メッセージを印刷出力したりする。

【特許請求の範囲】

【請求項1】　少なくとも商品コードと販売価格とを各々具備する商品情報が多数の販売商品ごとに事前に格納されている情報記憶手段と、

商品コードの入力操作を受け付ける情報入力手段と、

入力操作された商品コードを検索キーとして前記情報記憶手段から商品情報を読み出す情報読出手段と、

読み出された商品情報に基づいて登録処理を実行する商品登録手段と、

実行される登録処理に関連する各種情報を表示出力する情報表示手段と、を具備するデータ処理装置において、

前記情報記憶手段に格納されている商品情報の一部として販売商品に関連した一連の商品メッセージが設定されており、

前記情報表示手段が登録処理の実行時に商品情報の商品メッセージも表示出力することを特徴とするデータ処理装置。

【請求項2】　少なくとも商品コードと販売価格とを各々具備する商品情報が多数の販売商品ごとに事前に格納されている情報記憶手段と、

商品コードの入力操作を受け付ける情報入力手段と、

入力操作された商品コードを検索キーとして前記情報記憶手段から商品情報を読み出す情報読出手段と、

読み出された商品情報に基づいて登録処理を実行する商品登録手段と、

実行された登録処理に関連する各種情報を印刷出力してレシートを発行する情報印刷手段と、を具備するデータ処理装置において、

前記情報記憶手段に格納されている商品情報の一部として販売商品に関連した一連の商品メッセージが設定されており、

前記情報印刷手段が登録処理された商品情報の商品メッセージもレシートに印刷出力することを特徴とするデータ処理装置。

【請求項3】　前記情報記憶手段に事前に格納されている商品情報の一部として商品メッセージの有無を示すメッセージフラグが設定されており、

前記情報読出手段は、メッセージフラグに対応して商品メッセージの読出処理を実行することを特徴とする請求項1または2記載のデータ処理装置。

【請求項4】　前記情報記憶手段が商品情報記憶部と商品メッセージ記憶部とを具備しており、

前記商品情報記憶部は、少なくとも商品コードと販売価格とに商品メッセージの識別情報が付与された商品情報が事前に格納されており、

前記商品メッセージ記憶部は、商品メッセージが識別情報とともに事前に格納されており、

情報読出手段は、商品コードを検索キーとして前記商品情報記憶部から商品情報を読み出すとともに、読み出された商品情報の識別情報を検索キーとして前記商品メッセージ記憶部から商品メッセージを読み出すことを特徴とする請求項1ないし3の何れか一記載のデータ処理装置。

【請求項5】　情報表示手段は、顧客用の表示部と店員用の表示部とを別個に具備しており、商品情報の商品メッセージを顧客用の表示部に表示出力することを特徴とする請求項1記載のデータ処理装置。

【請求項6】　情報表示手段は、顧客用の表示部と店員用の表示部とを別個に具備しており、商品情報の商品メッセージを店員用の表示部に表示出力することを特徴とする請求項1記載のデータ処理装置。

【請求項7】　少なくとも商品コードと販売価格とを各々具備する商品情報が多数の販売商品ごとに事前に格納されている情報記憶手段と、商品コードの入力操作を受け付ける情報入力手段と、入力操作された商品コードを検索キーとして前記情報記憶手段から商品情報を読み出す情報読出手段と、読み出された商品情報に基づいて登録処理を実行する商品登録手段と、実行される登録処理に関連する各種情報を表示出力する情報表示手段と、を具備するデータ処理装置のデータ処理方法において、

前記情報記憶手段に格納される商品情報の一部として販売商品に関連した一連の商品メッセージを設定しておき、

登録処理の実行時に商品情報の商品メッセージも前記情報表示手段に表示出力させるようにしたことを特徴とするデータ処理方法。

【請求項8】　少なくとも商品コードと販売価格とを各々具備する商品情報が多数の販売商品ごとに事前に格納されている情報記憶手段と、商品コードの入力操作を受け付ける情報入力手段と、入力操作された商品コードを検索キーとして前記情報記憶手段から商品情報を読み出す情報読出手段と、読み出された商品情報に基づいて登録処理を実行する商品登録手段と、実行された登録処理に関連する各種情報を印刷出力してレシートを発行する情報印刷手段と、を具備するデータ処理装置のデータ処理方法において、

前記情報記憶手段に格納される商品情報の一部として販売商品に関連した一連の商品メッセージを設定しておき、

登録処理された商品情報の商品メッセージも前記情報印刷手段にレシートに印刷出力させるようにしたことを特徴とするデータ処理方法。

【発明の詳細な説明】

【0001】

【発明の属する技術分野】本発明は、販売商品を登録処理するデータ処理装置および方法に関する。

【0002】

【従来の技術】従来、販売商品の登録処理には、電子キャッシュレジスタやPOS（PointOf　Sales)ターミナル等のデータ処理装置が利用されている。このような

データ処理装置の一従来例を図6ないし図8を参照して以下に説明する。なお、図6はデータ処理装置であるPOSターミナルの物理的構造を示すブロック図、図7は情報記憶手段に相当するPLUメモリの記憶内容を示す模式図、図8はPOSターミナルのデータ処理方法を示すフローチャートである。

【0003】まず、ここでデータ処理装置として例示するPOSターミナル1は、図6に示すように、マイクロコンピュータからなるメイン制御部2を具備している。このメイン制御部2は、コンピュータの主体としてCPU（Central ProcessingUnit）3を具備しており、このCPU3には、情報記憶媒体としてROM（ReadOnly Memory）4とRAM（Random Access Memory）5とが接続されている。

【0004】ROM4は、CPU3の制御プログラムなどのソフトウェアを事前に固定記憶しており、RAM5は、CPU3の処理データなどを一時記憶する記憶エリアが確保されており、CPU3は、適正な制御プログラムや入力データなどに対応して各種のデータ処理を実行する。

【0005】メイン制御部2にはシステムバス6が接続されており、このシステムバス6には、バーコードスキャナ7、キーボード8、顧客用と店員用とのディスプレイ9、10、PLU（Price Look Up）メモリ11、メインメモリ12、R／J（Receipt／Journal）プリンタ13、通信I／F（Interface）14、等が接続されている。

【0006】バーコードスキャナ7は、例えば、レーザ光源や受光素子やデコーダ等からなり、販売商品にラベル等で付与されたバーコードを読取走査して商品コードを入力する。キーボード8は、テンキーやPLUキー等を具備しており、手動操作により商品コード等の各種情報が入力される。

【0007】顧客用と店員用とのディスプレイ9、10は、例えば、ドットマトリクスにより各種情報を表示出力するLCD（Liluid Crystal Display）やCRT（Cathode-Ray Tube）からなり、登録処理に関連した商品名称や販売価格などの各種情報を顧客と店員とに各々表示する。

【0008】PLUメモリ11は、例えば、HDD（Hard Disc Drive）等の大容量の情報記憶媒体の記憶エリアからなり、図7に示すように、ここでは商品コードと商品名称と販売価格からなる商品情報が多数の販売商品ごとに事前に格納されている。メインメモリ12も、大容量の情報記憶媒体の記憶エリアからなり、登録処理に関連した各種情報を蓄積する。

【0009】R／Jプリンタ13は、例えば、二連の連続シートを印刷用紙とするサーマルプリンタからなり、実行された登録処理に関連する商品名称や販売価格などの各種情報を、二連の連続シートに印刷出力して顧客用のレシートと店舗用のジャーナルとを発行する。

【0010】通信I／F14には、LAN（Local Area Network）等の通信ネットワーク15が接続されており、この通信ネットワーク15には、他の多数のPOSターミナルや少なくとも一個のホストコンピュータ（ともに図示せず）が接続されている。通信I／F14は、例えば、メインメモリ12に蓄積された処理情報などの各種情報をホストコンピュータに送信するとともに、PLUメモリ11に格納される最新の商品情報などの各種情報をホストコンピュータから受信する。

【0011】上述のような構造のPOSターミナル1は、販売商品の登録処理を実行することができる。より詳細には、顧客が購入を希望する販売商品を店員が待機するPOSターミナル1の位置に持ち寄ると、店員は販売商品に付与されているラベルのバーコードをバーコードスキャナ7に読取走査させたり、ラベルの商品コードをキーボード8に手動入力するなどして、商品コードをPOSターミナル1に入力操作する。

【0012】POSターミナル1は、図8に示すように、商品コードが入力されると（ステップS1）、これを検索キーとしてメイン制御部2がPLUメモリ11から商品情報を読み出す（ステップS2）。このように読み出された商品情報の商品名称や販売価格が、メイン制御部2により顧客用と店員用とのディスプレイ9、10に表示出力され（ステップS3）、商品コード等の各種情報がメインメモリ12に蓄積されるなどして販売商品の登録処理が実行される（ステップS4）。

【0013】上述のような登録処理が、顧客が購入を希望する全部の販売商品ごとに実行され（ステップS5）、全部の販売商品で登録処理が完了すると、顧客と店員とで料金や釣銭が授受されるなどして精算処理が実行される（ステップS6）。このように精算処理が完了すると、実行された登録処理に関連する各種情報がメイン制御部2によりメインメモリ12から読み出されてR／Jプリンタ13まで転送され、このR／Jプリンタ13により各種情報が二連の連続シートに印刷出力されて顧客用のレシートと店舗用のジャーナルとが発行される（ステップS7）。

【0014】
【発明が解決しようとする課題】上述のようなPOSターミナル1では、販売商品の商品コードがバーコードスキャナ7やキーボード8で入力されるとPLUメモリ11から商品情報を読み出して登録処理し、登録処理する各種情報をディスプレイ9、10で表示したり登録処理した各種情報をR／Jプリンタ13で印刷するなどして販売商品の登録処理を実行する。

【0015】しかし、上述のようなPOSターミナル1では、ディスプレイ9、10で表示出力されたりR／Jプリンタ13で印刷出力される各種情報は、販売商品の商品名称や販売価格などであり、販売商品に関連した多

様で詳細な情報を顧客に提供することができない。

【0016】本発明は上述のような課題に鑑みてなされたものであり、販売商品に関連した多様で詳細な情報を顧客に提供することができるデータ処理装置および方法を提供することを目的とする。

【0017】
【課題を解決するための手段】本発明の一のデータ処理装置は、少なくとも商品コードと販売価格とを各々具備する商品情報が多数の販売商品ごとに事前に格納されている情報記憶手段と、商品コードの入力操作を受け付ける情報入力手段と、入力操作された商品コードを検索キーとして前記情報記憶手段から商品情報を読み出す情報読出手段と、読み出された商品情報に基づいて登録処理を実行する商品登録手段と、実行される登録処理に関連する各種情報を表示出力する情報表示手段と、を具備するデータ処理装置において、前記情報記憶手段に格納されている商品情報の一部として販売商品に関連した一連の商品メッセージが設定されており、前記情報表示手段が登録処理の実行時に商品情報の商品メッセージも表示出力する。

【0018】従って、販売商品を登録処理する場合、商品コードの入力操作が情報入力手段により受け付けられると、この入力操作された商品コードを検索キーとして情報読出手段により情報記憶手段から商品情報が読み出される。このように読み出された商品情報に基づいて商品登録手段により登録処理が実行されるとともに、この実行される登録処理に関連する各種情報が情報表示手段により表示出力される。

【0019】上述のように登録処理に関連する各種情報が情報表示手段により表示出力されるとき、商品情報の一部として情報記憶手段に事前に格納されている一連の商品メッセージも表示出力されるので、販売商品に関連した多様で詳細な情報が顧客に提供される。

【0020】なお、本発明で云うデータ処理装置とは、販売商品の登録処理に利用される装置であり、ホストコンピュータに接続されたPOSターミナルや、スタンドアロンの電子キャッシュレジスタなどを許容する。商品メッセージとは、その販売商品に関連して顧客に提供することが有用な多様で詳細な一連のメッセージを意味しており、例えば、販売商品の使用や保守の注意事項のガイダンスなどを許容する。

【0021】また、本発明で云う情報記憶手段とは、多数の販売商品の商品情報を記憶できるものであれば良く、例えば、HDDやRAM等の情報記憶媒体の記憶エリアなどを許容する。その他の各種手段は、その機能を実現するよう形成されていれば良く、例えば、専用のハードウェア、適正な機能がプログラムにより付与されたコンピュータ、適正なプログラムによりコンピュータの内部に実現された機能、これらの組み合わせ、等を許容する。

【0022】本発明の他のデータ処理装置は、少なくとも商品コードと販売価格とを各々具備する商品情報が多数の販売商品ごとに事前に格納されている情報記憶手段と、商品コードの入力操作を受け付ける情報入力手段と、入力操作された商品コードを検索キーとして前記情報記憶手段から商品情報を読み出す情報読出手段と、読み出された商品情報に基づいて登録処理を実行する商品登録手段と、実行された登録処理に関連する各種情報を印刷出力してレシートを発行する情報印刷手段と、を具備するデータ処理装置において、前記情報記憶手段に格納されている商品情報の一部として販売商品に関連した一連の商品メッセージが設定されており、前記情報印刷手段が登録処理された商品情報の商品メッセージもレシートに印刷出力する。

【0023】従って、販売商品を登録処理する場合、商品コードの入力操作が情報入力手段により受け付けられると、この入力操作された商品コードを検索キーとして情報読出手段により情報記憶手段から商品情報が読み出される。このように読み出された商品情報に基づいて商品登録手段により登録処理が実行され、この実行された登録処理に関連する各種情報が情報印刷手段によりレシートに印刷出力される。

【0024】上述のように登録処理に関連する各種情報がレシートに印刷出力されるとき、商品情報の一部として情報記憶手段に事前に格納されている一連の商品メッセージも印刷出力されるので、販売商品に関連した多様で詳細な情報が顧客に提供される。

【0025】上述のようなデータ処理装置における他の発明としては、前記情報記憶手段に事前に格納されている商品情報の一部として商品メッセージの有無を示すメッセージフラグが設定されており、前記情報読出手段は、メッセージフラグに対応して商品メッセージの読出処理を実行する。従って、情報読出手段が情報記憶手段から商品情報を読み出すとき、メッセージフラグに対応して商品メッセージの読出処理を実行するので、登録されていない商品メッセージに対する読出処理は実行されない。

【0026】上述のようなデータ処理装置における他の発明としては、前記情報記憶手段が商品情報記憶部と商品メッセージ記憶部とを具備しており、前記商品情報記憶部は、少なくとも商品コードと販売価格とに商品メッセージの識別情報が付与された商品情報が事前に格納されており、前記商品メッセージ記憶部は、商品メッセージが識別情報とともに事前に格納されており、情報読出手段は、商品コードを検索キーとして前記商品情報記憶部から商品情報を読み出すとともに、読み出された商品情報の識別情報を検索キーとして前記商品メッセージ記憶部から商品メッセージを読み出す。

【0027】従って、情報読出手段が商品コードを検索キーとして情報記憶手段から商品情報を読み出すとき、

最初に商品情報記憶部から商品情報が読み出され、その識別情報を検索キーとして商品メッセージ記憶部から商品メッセージが読み出される。

【0028】上述のようなデータ処理装置における他の発明としては、情報表示手段は、顧客用の表示部と店員用の表示部とを別個に具備しており、商品情報の商品メッセージを顧客用の表示部に表示出力する。従って、顧客用の表示部による商品メッセージの表示出力により、販売商品に関連した多様で詳細な情報が顧客に直接に提供される。

【0029】上述のようなデータ処理装置における他の発明としては、情報表示手段は、顧客用の表示部と店員用の表示部とを別個に具備しており、商品情報の商品メッセージを店員用の表示部に表示出力する。従って、店員用の表示部により商品メッセージが店員に表示出力されるので、例えば、この店員により販売商品に関連した多様で詳細な情報が客に口頭で提供される。

【0030】本発明の一のデータ処理方法は、少なくとも商品コードと販売価格とを各々具備する商品情報が多数の販売商品ごとに事前に格納されている情報記憶手段と、商品コードの入力操作を受け付ける情報入力手段と、入力操作された商品コードを検索キーとして前記情報記憶手段から商品情報を読み出す情報読出手段と、読み出された商品情報に基づいて登録処理を実行する商品登録手段と、実行される登録処理に関連する各種情報を表示出力する情報表示手段と、を具備するデータ処理装置のデータ処理方法において、前記情報記憶手段に格納される商品情報の一部として販売商品に関連した一連の商品メッセージを設定しておき、登録処理の実行時に商品情報の商品メッセージも前記情報表示手段に表示出力させるようにした。

【0031】従って、販売商品を登録処理する場合、商品コードの入力操作が情報入力手段により受け付けられると、この入力操作された商品コードを検索キーとして情報読出手段により情報記憶手段から商品情報が読み出される。このように読み出された商品情報に基づいて商品登録手段により登録処理が実行されるとともに、この実行される登録処理に関連する各種情報が情報表示手段により表示出力される。

【0032】上述のように登録処理に関連する各種情報が情報表示手段により表示出力されるとき、商品情報の一部として情報記憶手段に事前に格納されている一連の商品メッセージも表示出力されるので、販売商品に関連した多様で詳細な情報が顧客に提供される。

【0033】本発明の他のデータ処理方法は、少なくとも商品コードと販売価格とを各々具備する商品情報が多数の販売商品ごとに事前に格納されている情報記憶手段と、商品コードの入力操作を受け付ける情報入力手段と、入力操作された商品コードを検索キーとして前記情報記憶手段から商品情報を読み出す情報読出手段と、読

み出された商品情報に基づいて登録処理を実行する商品登録手段と、実行された登録処理に関連する各種情報を印刷出力してレシートを発行する情報印刷手段と、を具備するデータ処理装置のデータ処理方法において、前記情報記憶手段に格納される商品情報の一部として販売商品に関連した一連の商品メッセージを設定しておき、登録処理された商品情報の商品メッセージも前記情報印刷手段にレシートに印刷出力させるようにした。

【0034】従って、販売商品を登録処理する場合、商品コードの入力操作が情報入力手段により受け付けられると、この入力操作された商品コードを検索キーとして情報読出手段により情報記憶手段から商品情報が読み出される。このように読み出された商品情報に基づいて商品登録手段により登録処理が実行され、この実行された登録処理に関連する各種情報が情報印刷手段によりレシートに印刷出力される。

【0035】上述のように登録処理に関連する各種情報がレシートに印刷出力されるとき、商品情報の一部として情報記憶手段に事前に格納されている一連の商品メッセージも印刷出力されるので、販売商品に関連した多様で詳細な情報が顧客に提供される。

【0036】

【発明の実施の形態】本発明の実施の一形態を図1ないし図4を参照して以下に説明する。なお、本実施の形態に関して前述した一従来例と同一の部分は、同一の名称を使用して詳細な説明は省略する。

【0037】図1は本実施の形態のデータ処理装置であるPOSターミナルの論理的構造を示す模式図、図2は物理的構造を示すブロック図、図3は情報記憶手段に相当するPLUメモリの記憶内容を示す模式図、図4は本実施の形態のデータ処理方法を示すフローチャート、図5は一変形例のPLUメモリの記憶内容を示す模式図である。

【0038】まず、本実施の形態でデータ処理装置として例示するPOSターミナル21も、図2に示すように、マイクロコンピュータからなるメイン制御部22を具備しており、このメイン制御部22は、コンピュータの主体であるCPU23と情報記憶媒体であるROM24およびRAM25を具備している。

【0039】メイン制御部22にはシステムバス26が接続されており、このシステムバス26には、バーコードスキャナ27、キーボード28、顧客用と店員用とのディスプレイ29，30、情報記憶手段に相当するPLUメモリ31、メインメモリ32、R／Jプリンタ33、通信I／F34、等が接続されている。

【0040】PLUメモリ31は、やはりHDD等の大容量の情報記憶媒体の記憶エリアからなり、商品情報が多数の販売商品ごとに事前に格納されている。ただし、本実施の形態のPOSターミナル21では、図3に示すように、PLUメモリ31に格納されている商品情報

に、メッセージフラグと商品メッセージとが追加されている。商品情報のメッセージフラグは、商品メッセージの有無を示すビットデータからなり、商品メッセージは、例えば、その販売商品の使用や保守の注意事項のガイダンスのテストデータからなる。

【0041】本実施の形態のPOSターミナル21では、例えば、メイン制御部22のROM24に適正な制御プログラムが事前に格納されており、CPU23が制御プログラムや入力データに対応して適正なデータ処理を実行することにより、各種手段が各種機能として実現されている。このような各種手段として、本実施の形態のPOSターミナル21は、図1に示すように、情報記憶手段41、情報入力手段42、情報読出手段43、商品登録手段44、情報表示手段45、情報印刷手段46、等を論理的に具備している。

【0042】情報記憶手段41は、前述のようにPLUメモリ31に相当し、商品コード、商品名称、販売価格、メッセージフラグ、商品メッセージ、等からなる商品情報が多数の販売商品ごとに事前に格納されている。情報入力手段42は、バーコードスキャナ27やキーボード28の入力データをメイン制御部22が受け付けることにより、商品コードの入力操作を受け付ける。

【0043】情報読出手段43は、上述のような入力データと制御プログラムとに対応してメイン制御部22がPLUメモリ31にアクセスすることにより、入力操作された商品コードを検索キーとして情報記憶手段41から商品情報を読み出す。商品登録手段44は、メイン制御部22が各種情報をメインメモリ32に一時記憶させることなどにより、読み出された商品情報に基づいて登録処理を実行する。

【0044】情報表示手段45は、メイン制御部22が各種情報をディスプレイ29，30に表示出力させることにより、実行される登録処理に関連する各種情報を表示出力する。情報印刷手段46は、メイン制御部22が各種情報をR／Jプリンタ33に印刷出力させることにより、実行された登録処理に関連する各種情報を印刷出力してレシートを発行する。

【0045】本実施の形態のPOSターミナル21では、上述のように情報表示手段45がディスプレイ29，30により登録処理に関連する各種情報を表示出力するとき、商品情報の一部としてPLUメモリ31に格納されている商品メッセージも表示出力される。さらに、上述のように情報印刷手段46がR／Jプリンタ33により登録処理に関連する各種情報をレシートに印刷出力するとき、このレシートに商品メッセージも印刷出力される。

【0046】なお、本実施の形態のPOSターミナル21では、情報表示手段45が顧客用の表示部であるディスプレイ29と店員用の表示部であるディスプレイ30とを具備しており、ここでは商品メッセージが両方のデ

ィスプレイ29，30に表示出力されるよう設定されている。また、情報印刷手段46のR／Jプリンタ33は、同様な内容の各種情報をレシートとジャーナルとに印刷出力するが、商品メッセージは顧客用のレシートのみに印刷して店舗用のジャーナルには印刷しないよう設定されている。

【0047】上述のようなPOSターミナル各種手段は、必要によりキーボード28やディスプレイ29，30等のハードウェアを利用して実現されるが、その主体はROM24等に書き込まれたソフトウェアに対応してCPU23が動作することにより実現されている。

【0048】このようなソフトウェアは、例えば、バーコードスキャナ27やキーボード28等による商品コードの入力操作を受け付けること、入力操作された商品コードを検索キーとしてPLUメモリ31から商品情報を読み出すこと、読み出された商品情報に基づいて登録処理を実行すること、実行される登録処理に関連する各種情報をディスプレイ29，30に表示出力させること、実行された登録処理に関連する各種情報をR／Jプリンタ33に印刷出力させること、等の処理動作をCPU23等に実行させるための制御プログラムとしてRAM25等の情報記憶媒体に格納されている。

【0049】上述のような構成において、本実施の形態のPOSターミナル21が販売商品を登録処理する場合のデータ処理方法を以下に説明する。まず、顧客が購入を希望する販売商品を店員が待機するPOSターミナル21の位置に持ち寄ると、店員は販売商品に付与されているラベルのバーコードをバーコードスキャナ27に読取走査させたり、ラベルの商品コードをキーボード28に手動入力するなどして、商品コードをPOSターミナル21に入力操作する。

【0050】このとき、本実施の形態のPOSターミナル21は、図4に示すように、商品コードが入力されると（ステップT1）、これを検索キーとしてメイン制御部22によりPLUメモリ31から商品情報が読み出され（ステップT2）、このように読み出された商品情報のメッセージフラグの“0／1”がメイン制御部22により判定される（ステップT3）。

【0051】このメッセージフラグが“1”の場合には、商品メッセージもPLUメモリ31から読み出され（ステップS4）、商品名称や販売価格とともに顧客用と店員用とのディスプレイ29，30に表示出力される（ステップT5）。一方、メッセージフラグが“0”の場合には、PLUメモリ31から商品メッセージは読み出されず、商品メッセージが含まれない商品情報の商品名称や販売価格だけがディスプレイ29，30に表示出力される。

【0052】上述のような状態で商品コード等の各種情報がメインメモリ32に蓄積されるなどして販売商品の登録処理が実行され（ステップT6）、このような登録処

理が、顧客が購入を希望する全部の販売商品ごとに実行され（ステップＴ７）、全部の販売商品で登録処理が完了すると、顧客と店員とで料金や釣銭が授受されるなどして精算処理が実行され（ステップＴ８）。

【００５３】このように精算処理が完了すると、実行された登録処理に関連する各種情報がメイン制御部２２によりメインメモリ３２から読み出されてＲ／Ｊプリンタ３３まで転送され、このＲ／Ｊプリンタ３３により各種情報が二連の連続シートに印刷出力されてレシートとジャーナルとが発行される（ステップＴ９）。

【００５４】このとき、上述のようにメッセージフラグが“１”で商品メッセージが読み出された販売商品に対しては、その商品名称や販売価格とともに商品メッセージもレシートに印刷され、メッセージフラグが“０”で商品メッセージが読み出されなかった販売商品に対しては、レシートに商品メッセージは印刷されない。

【００５５】本実施の形態のＰＯＳターミナル２１では、上述のように販売商品を登録処理するとき、その販売商品の商品メッセージがディスプレイ２９，３０に表示出力され、販売商品の使用や保守の注意事項などを顧客に提供することができる。さらに、登録処理した販売商品の商品メッセージはレシートにも印刷出力されるので、販売商品の使用や保守の注意事項などの情報を顧客が持ち帰ることができる。

【００５６】なお、本発明は上記形態に限定されるものではなく、その要旨を逸脱しない範囲で各種の変形を許容する。例えば、上記形態では一連の商品情報に商品コードや商品名称等とともに商品メッセージも設定して情報記憶手段である一個のＰＬＵメモリ１１に格納しておくことを例示した。

【００５７】しかし、図５に示すように、情報記憶手段であるＰＬＵメモリに二個のデータファイルなどとして商品情報記憶部５１と商品メッセージ記憶部５２とを別個に形成しておき、商品情報記憶部５１には商品コードや販売価格とともに商品メッセージの識別情報が付与された商品情報を事前に格納しておき、商品メッセージ記憶部５２に、識別情報とともに商品メッセージを事前に格納しておくことも可能である。

【００５８】この場合、情報読出手段となるメイン制御部は、商品コードを検索キーとして商品情報記憶部５１から商品情報を読み出してから、読み出された商品情報の識別情報を検索キーとして商品メッセージ記憶部５２から商品メッセージを読み出せば良い。このとき、商品情報のメッセージフラグを確認することにより、格納されていない商品メッセージの読出処理は実行しない。

【００５９】上述のようにすることで、複数の販売商品で商品メッセージを共用することができるので、情報記憶手段となるＰＬＵメモリの記憶容量を削減することができ、商品情報の登録作業も簡略化することができる。

【００６０】また、上記形態ではＰＯＳターミナル２１

が商品メッセージをディスプレイ２９の表示出力とＲ／Ｊプリンタ３３の印刷出力との両方で顧客に提供することを例示したが、これを一方とすることも可能である。

【００６１】商品メッセージをディスプレイ２９の表示出力のみで顧客に提供する場合、顧客に販売商品の商品メッセージを登録処理と同時に提供することができ、レシートの印刷内容を削減して連続シートを節約することもできる。商品メッセージをＲ／Ｊプリンタ３３の印刷出力のみで顧客に提供する場合、重要な商品メッセージを顧客が持ち帰ることができ、ディスプレイ２９としてセグメント方式のＬＥＤ（Light Emitting Diode）ディスプレイなどの簡素なデバイスを利用することもできる。

【００６２】さらに、上記形態ではＰＯＳターミナル２１が商品メッセージを顧客用と店員用とのディスプレイ２９，３０の両方で商品メッセージを表示出力することを例示したが、これを一方とすることも可能である。

【００６３】商品メッセージを顧客用のディスプレイ２９のみで表示出力する場合、店員には無用な商品メッセージを店員用のディスプレイ３０に表示出力する必要がなく、店員用のディスプレイ３０として簡素なデバイスを利用することができる。商品メッセージを店員用のディスプレイ３０のみで表示出力する場合、顧客用のディスプレイ２９として簡素なデバイスを利用することができ、例えば、店員が顧客に商品メッセージを口頭で報知することで、より有効なサービスを顧客に提供することができる。

【００６４】また、上記形態ではＲＯＭ２４等にソフトウェアとして格納されている制御プログラムに従ってＣＰＵ２３が動作することにより、ＰＯＳターミナル２１の各種手段が実現されることを例示した。しかし、このような各種手段の各々を固有のハードウェアとして形成することも可能であり、一部をソフトウェアとしてＲＯＭ２４等に格納するとともに一部をハードウェアとして形成することも可能である。

【００６５】
【発明の効果】本発明は以上説明したように構成されているので、以下に記載するような効果を奏する。

【００６６】請求項１記載の発明のデータ処理装置は、少なくとも商品コードと販売価格とを各々具備する商品情報が多数の販売商品ごとに事前に格納されている情報記憶手段と、商品コードの入力操作を受け付ける情報入力手段と、入力操作された商品コードを検索キーとして前記情報記憶手段から商品情報を読み出す情報読出手段と、読み出された商品情報に基づいて登録処理を実行する商品登録手段と、実行される登録処理に関連する各種情報を表示出力する情報表示手段と、を具備するデータ処理装置において、前記情報記憶手段に格納されている商品情報の一部として販売商品に関連した一連の商品メッセージが設定されており、前記情報表示手段が登録処

理の実行時に商品情報の商品メッセージも表示出力することにより、販売商品を登録処理するときに販売商品の商品メッセージが表示出力されるので、販売商品の使用や保守の注意事項などの多様で詳細な情報を顧客に提供することができる。

【0067】請求項2記載の発明のデータ処理装置は、少なくとも商品コードと販売価格とを各々具備する商品情報が多数の販売商品ごとに事前に格納されている情報記憶手段と、商品コードの入力操作を受け付ける情報入力手段と、入力操作された商品コードを検索キーとして前記情報記憶手段から商品情報を読み出す情報読出手段と、読み出された商品情報に基づいて登録処理を実行する商品登録手段と、実行された登録処理に関連する各種情報を印刷出力してレシートを発行する情報印刷手段と、を具備するデータ処理装置において、前記情報記憶手段に格納されている商品情報の一部として販売商品に関連した一連の商品メッセージが設定されており、前記情報印刷手段が登録処理された商品情報の商品メッセージもレシートに印刷出力することにより、販売商品を登録処理したときに発行されるレシートに販売商品の商品メッセージが印刷出力されるので、販売商品の使用や保守の注意事項などの多様で詳細な情報を顧客に提供することができる。

【0068】請求項3記載の発明は、請求項1または2記載のデータ処理装置において、前記情報記憶手段に事前に格納されている商品情報の一部として商品メッセージの有無を示すメッセージフラグが設定されており、前記情報読出手段は、メッセージフラグに対応して商品メッセージの読出処理を実行することにより、登録されていない商品メッセージに対する読出処理を防止することができる。請求項4記載の発明は、請求項1ないし3の何れか一記載のデータ処理装置において、前記情報記憶手段が商品情報記憶部と商品メッセージ記憶部とを具備しており、前記商品情報記憶部は、少なくとも商品コードと販売価格とに商品メッセージの識別情報が付与された商品情報が事前に格納されており、前記商品メッセージ記憶部は、商品メッセージが識別情報とともに事前に格納されており、情報読出手段は、商品コードを検索キーとして前記商品情報記憶部から商品情報を読み出すとともに、読み出された商品情報の識別情報を検索キーとして前記商品メッセージ記憶部から商品メッセージを読み出すことにより、複数の商品情報で商品メッセージを共用することが可能なので、情報記憶手段の記憶容量を削減することができる。

【0069】請求項5記載の発明は、請求項1記載のデータ処理装置において、情報表示手段は、顧客用の表示部と店員用の表示部とを別個に具備しており、商品情報の商品メッセージを顧客用の表示部に表示出力することにより、商品メッセージを販売商品の登録処理と同時に顧客に提供することができる。請求項6記載の発明は、

請求項1記載のデータ処理装置において、情報表示手段は、顧客用の表示部と店員用の表示部とを別個に具備しており、商品情報の商品メッセージを店員用の表示部に表示出力することにより、登録処理する販売商品の商品メッセージを店員が顧客に口頭で提供するようなことができる。

【0070】請求項7記載の発明のデータ処理方法は、少なくとも商品コードと販売価格とを各々具備する商品情報が多数の販売商品ごとに事前に格納されている情報記憶手段と、商品コードの入力操作を受け付ける情報入力手段と、入力操作された商品コードを検索キーとして前記情報記憶手段から商品情報を読み出す情報読出手段と、読み出された商品情報に基づいて登録処理を実行する商品登録手段と、実行される登録処理に関連する各種情報を表示出力する情報表示手段と、を具備するデータ処理装置のデータ処理方法において、前記情報記憶手段に格納される商品情報の一部として販売商品に関連した一連の商品メッセージを設定しておき、登録処理の実行時に商品情報の商品メッセージも前記情報表示手段に表示出力させるようにしたことにより、販売商品を登録処理するときに販売商品の商品メッセージが表示出力されるので、販売商品の使用や保守の注意事項などの多様で詳細な情報を顧客に提供することができる。

【0071】請求項8記載の発明のデータ処理方法は、少なくとも商品コードと販売価格とを各々具備する商品情報が多数の販売商品ごとに事前に格納されている情報記憶手段と、商品コードの入力操作を受け付ける情報入力手段と、入力操作された商品コードを検索キーとして前記情報記憶手段から商品情報を読み出す情報読出手段と、読み出された商品情報に基づいて登録処理を実行する商品登録手段と、実行された登録処理に関連する各種情報を印刷出力してレシートを発行する情報印刷手段と、を具備するデータ処理装置のデータ処理方法において、前記情報記憶手段に格納される商品情報の一部として販売商品に関連した一連の商品メッセージを設定しておき、登録処理された商品情報の商品メッセージも前記情報印刷手段にレシートに印刷出力させるようにしたことにより、販売商品を登録処理したときに発行されるレシートに販売商品の商品メッセージが印刷出力されるので、販売商品の使用や保守の注意事項などの多様で詳細な情報を顧客に提供することができる。

【図面の簡単な説明】
【図1】本発明の実施の一形態のデータ処理装置であるPOSターミナルの論理的構造を示す模式図である。
【図2】データ処理装置の物理的構造を示すブロック図である。
【図3】情報記憶手段であるPLUメモリの記憶内容を示す模式図である。
【図4】POSターミナルが販売商品を登録処理する場合のデータ処理方法を示すフローチャートである。

【図5】一変形例の情報記憶手段であるPLUメモリの
記憶内容を示す模式図である。

【図6】一従来例のデータ処理装置であるPOSターミ
ナルの物理的構造を示す模式図である。

【図7】PLUメモリの記憶内容を示す模式図である。

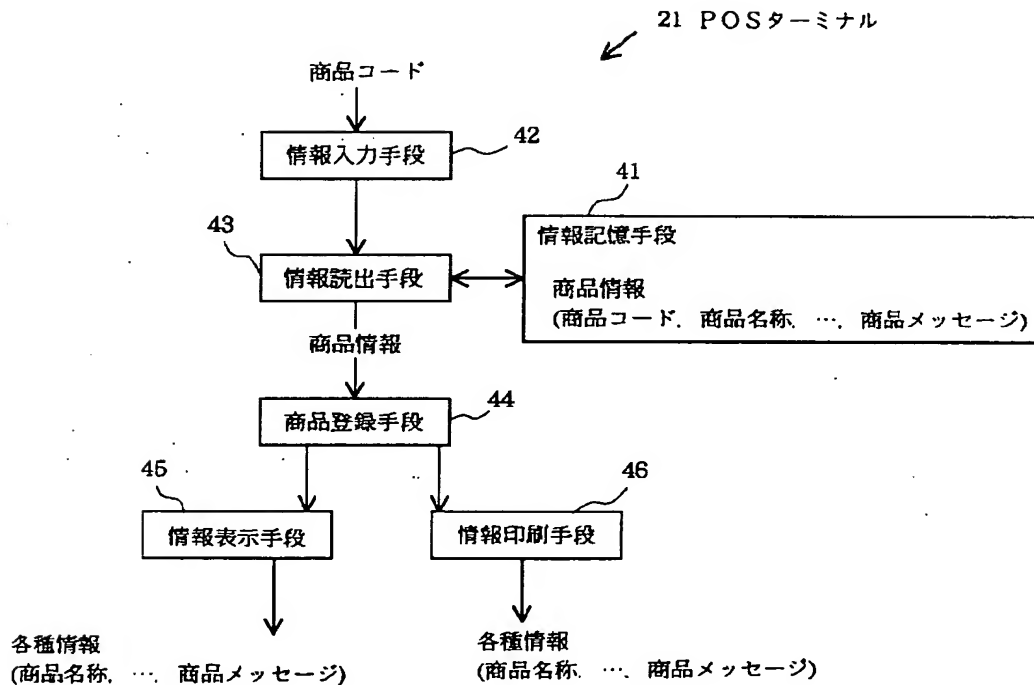【図8】POSターミナルが販売商品を登録処理する場
合のデータ処理方法を示すフローチャートである。

【符号の説明】
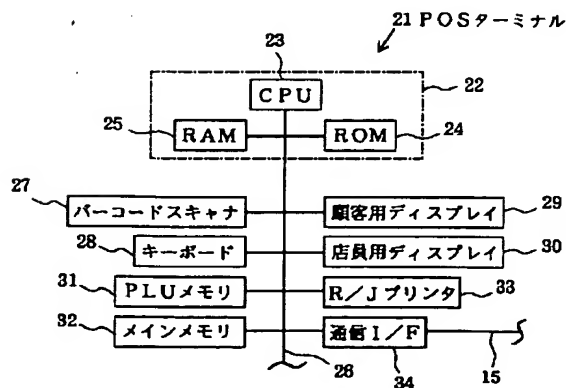
21　データ処理装置であるPOSターミナル
22　各種手段として機能するメイン制御部
23　コンピュータであるCPU
24　情報記憶媒体であるROM
25　情報記憶媒体であるRAM

27　バーコードスキャナ
28　キーボード
29　顧客用の表示部であるディスプレイ
30　店員用の表示部であるディスプレイ
31　情報記憶手段に相当するPLUメモリ
33　R／Jプリンタ
41　情報記憶手段
42　情報入力手段
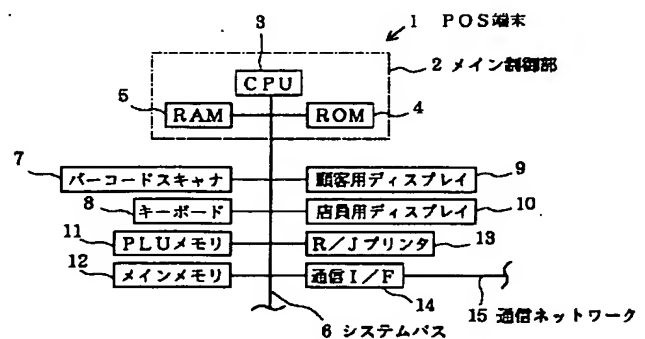43　情報読出手段
44　商品登録手段
45　情報表示手段
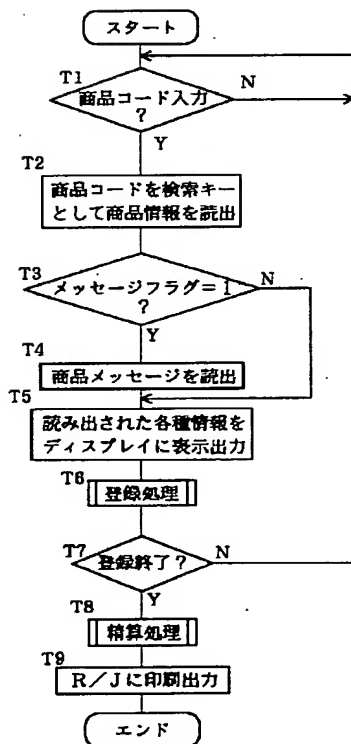46　情報印刷手段

【図1】

【図2】　　　　　　　　　　　　　　【図6】

【図3】

31(41)

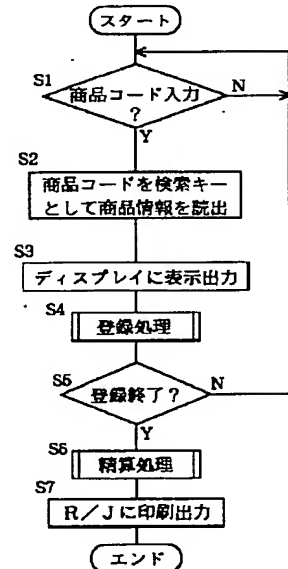| 商品コード	商品名	価格	ﾒｯｾｰｼﾞﾌﾗｸﾞ	メッセージ内容
4912345678901	婦人皮コート	29,000	1	保管時は陰干しして、皮専用クリームを塗布してください。
4978945612302	婦人シャツ	5,900	0	
4996385274105	ウールコート	19,800	1	ドライクリーニングをしてください。
4974185296305	ジャケット	14,800	1	セットアップ商品です。スカート、パンツなど豊富に取り揃えておりますので、是非この機会にご覧ください。
4985236974107	スカート	7,900	1	アイロンをかける場合は低温で、必ず当て布をしてください。

【図4】

```
        スタート
          │
   T1   ◇─────N───┐
     商品コード入力      │
        ？          │
          │Y          │
   T2  ┌──────┐   │
      商品コードを検索キー   │
      として商品情報を読出   │
          │          │
   T3   ◇──N──┐     │
     メッセージフラグ＝1 │     │
        ？      │     │
          │Y      │     │
   T4  ┌────┐  │     │
      商品メッセージを読出 │     │
          │←────┘     │
   T5 ┌──────┐         │
     読み出された各種情報を    │
     ディスプレイに表示出力    │
          │              │
   T6  ┌──────┐       │
       登録処理           │
          │              │
   T7  ◇─登録終了？─N──┘
          │Y
   T8  ┌──────┐
       精算処理
          │
   T9 ┌──────┐
      R／Jに印刷出力
          │
        エンド
```

【図7】

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商品コード	商品名	価格
4912345678901	婦人皮コート	29,000
4978945612302	婦人シャツ	5,900
4996385274105	ウールコート	19,800
4974185296305	ジャケット	14,800
4985236974107	スカート	7,900

【図8】

```
        スタート
          │
   S1   ◇─────N───┐
     商品コード入力      │
        ？          │
          │Y          │
   S2  ┌──────┐   │
      商品コードを検索キー   │
      として商品情報を読出   │
          │          │
   S3  ┌──────┐   │
      ディスプレイに表示出力 │
          │          │
   S4  ┌────┐      │
       登録処理        │
          │          │
   S5  ◇─登録終了？─N──┘
          │Y
   S6  ┌────┐
       精算処理
          │
   S7 ┌──────┐
      R／Jに印刷出力
          │
        エンド
```

【図5】

(a)

商品コード	商品名	価格	メッセージ フラグ	メッセージ ID
4985265479130	ブラシ	600	0	
4986325987451	ごみ袋	198	0	
4921025478545	風邪薬	1,600	1	3
4968753012001	ほうき	1,000	0	

(b)

メッセージ ID	メッセージ内容
1	開封後はお早めにお召し上がりください。
2	開封後は冷暗所に保管してください。
3	服用後は眠くなることがありますので、車の運転等はお避けください。
4	長時間直射日光にあてますと、変質する恐れがありますのでご注意ください。